

# PATENT ASSIGNMENT COVER SHEET

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| <b>SUBMISSION TYPE:</b>      | NEW ASSIGNMENT |
| <b>NATURE OF CONVEYANCE:</b> | ASSIGNMENT     |

## CONVEYING PARTY DATA

| Name                                      | Execution Date |
|-------------------------------------------|----------------|
| HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P. | 10/27/2015     |

## RECEIVING PARTY DATA

|                        |                                           |
|------------------------|-------------------------------------------|
| <b>Name:</b>           | Hewlett Packard Enterprise Development LP |
| <b>Street Address:</b> | 11445 Compaq Center Drive West            |
| <b>City:</b>           | Houston                                   |
| <b>State/Country:</b>  | TEXAS                                     |
| <b>Postal Code:</b>    | 77070                                     |

## PROPERTY NUMBERS Total: 11947

| Property Type  | Number  |
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| Patent Number: | 5563096 |
| Patent Number: | 5600137 |
| Patent Number: | 5602721 |
| Patent Number: | 5612897 |
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**VALTRUS EXHIBIT 2032**  
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| Application Number: | 14763793 |
| Application Number: | 14763797 |

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| Application Number: | 14813068 |

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| Application Number: | 14845670 |
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| Application Number: | 14863044 |
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| Application Number: | 14866444 |

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| Application Number: | 29482442 |
| Application Number: | 29486630 |
| Application Number: | 29507762 |
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| Application Number: | 29538432 |
| Application Number: | 62074310 |
| Application Number: | 62074316 |
| Application Number: | 62136188 |
| Application Number: | 62172598 |
| Application Number: | 62188455 |
| Application Number: | 62188461 |

#### CORRESPONDENCE DATA

Fax Number:

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

Phone: (970) 898-7444

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**PATENT**

**REEL: 037079 FRAME: 0315**

Email: hpe.ip.mail@hp.com  
Correspondent Name: HEWLETT PACKARD ENTERPRISE  
Address Line 1: 3404 E. HARMONY ROAD MS 79  
Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER: 82111883

NAME OF SUBMITTER: JOANNA KEYT

SIGNATURE: /Joanna Keyt/

DATE SIGNED: 11/09/2015

**Total Attachments: 780**

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PATENT ASSIGNMENT Hewlett-Packard Development Company, L.P. TO  
Hewlett Packard Enterprise Development LP

**PATENT ASSIGNMENT**  
**FROM**  
**Hewlett-Packard Development Company, L.P.**  
**TO**  
**Hewlett Packard Enterprise Development LP**

This Patent Assignment, together with the attached Schedule A, is effective as of October 2, 2015.

WHEREAS, **Hewlett-Packard Development Company, L.P.**, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, Texas 77070, U.S .A. (hereinafter referred to as "Assignor"), is the legal title holder of the patents and patent applications identified in the attached Schedule A (collectively referred to as "Assigned Patents and Patent Applications");

WHEREAS, **Hewlett Packard Enterprise Development LP**, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, Texas 77070, U.S .A. (hereinafter referred to as "Assignee") desires to acquire Assignor's entire right, title and interest, including the right of priority, in, to and under the Assigned Patents and Patent Applications; and

NOW THEREFORE, for good and valuable consideration, the adequacy of which is hereby acknowledged, Assignor and Assignee agree as follows:

Assignor hereby assigns, transfers, conveys and delivers to Assignee the entirety of Assignor's right, title and interest, including without limitation the right of priority, in, to and under the Assigned Patents and Patent Applications, and any inventions and improvements set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for any of the Assigned Patents and Patent Applications, and any and all patents and patent applications of the United States and of foreign countries thereto that may be granted thereon or therefor, and any reissues, or reexaminations, or extensions thereof and any goodwill of the business symbolized by the Assigned Patents and Patent Applications, and the registration thereof. Assignee shall have the right to sue, counterclaim and recover for past, present, and future

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**PATENT**  
**REEL: 037079 FRAME: 0333**

PATENT ASSIGNMENT Hewlett-Packard Development Company, L.P. TO  
Hewlett Packard Enterprise Development LP

infringement and collect any royalties to third parties, damages (including past damages), or other income relating to the Assigned Patents and Patent Applications.

In connection with the foregoing, Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to record the transfer of the Assigned Patents to Assignee as assignee of Assignor's right, title and interest therein, and to issue any and all patents or certificates of invention or equivalent which may be granted upon any of the Assigned Patents in the name of Assignee, as the assignee to the entire interest therein.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their authorized representatives.

**FOR HEWLETT-PACKARD DEVELOPMENT  
COMPANY, L.P.**

By: HPQ Holdings, LLC, its General Partner

DocuSigned by:  
By: Robert Wasson  
Signature 38BF673837B481...

Robert D. Wasson  
Name

Chief Patent Counsel  
Title

October 27, 2015  
Date

**FOR HEWLETT PACKARD  
ENTERPRISE DEVELOPMENT LP**

By: Enterprise DC Holdings LLC, its General  
Partner

DocuSigned by:  
By: Curtis G. Rose  
Signature 016629078F4D3...

Curtis G. Rose  
Name

Chief Intellectual Property Counsel  
Title

October 27, 2015  
Date

## Schedule A of Patent Assignment

## Schedule A - Assigned Patents and Patent Applications

| HP Record ID | Status      | Patent Number | Filing Date | Grant Date | Application Number | CC | Title                                                                                                            |
|--------------|-------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------|
| 82579292     | Granted     | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2          | AT | Pattern Discovery In A Network Security System                                                                   |
| 82077266     | Granted     | 730253        | 7/26/1996   | 6/14/2001  | 1996065476         | AU | M/A For Operating Secured Resources Under Control Of Security Module                                             |
| 82163990     | Granted     | 698617        | 8/8/1996    | 2/18/1999  | 1996061954         | AU | DISTRIBUTED INTERACTIVE MULTIMEDIA SERVICE SYSTEM                                                                |
| 82169168     | Granted     | 2003248290    | 9/22/2003   | 6/25/2009  | 2003248290         | AU | Apparatus And Method For Telecommunications Services                                                             |
| 82579289     | Granted     | 2005240203    | 5/4/2005    | 1/27/2011  | 2005240203         | AU | Pattern Discovery In A Network Security System                                                                   |
| 82579386     | Granted     | 2007308830    | 10/25/2007  | 10/4/2012  | 2007308830         | AU | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security |
| 82579541     | Granted     | 2007339801    | 12/28/2007  | 3/22/2012  | 2007339801         | AU | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security                    |
| 82675335     | Granted     | 2009321637    | 11/13/2009  | 11/7/2013  | 2009321637         | AU | Data Centre And Apparatus And Method For Data Centre Cooling                                                     |
| 84078870     | Application |               | 6/8/2012    |            | 2012382008         | AU | PATIENT INFORMATION INTERFACE                                                                                    |
| 84122534     | Application |               | 6/29/2012   |            | 2012383493         | AU | CAPACITY PLANNING SYSTEM                                                                                         |
| 84208471     | Application |               | 9/30/2012   |            | 2012391038         | AU | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                            |
| 84164239     | Application |               | 9/19/2012   |            | 2012387668         | AU | METADATA TREE OF A PATIENT WITH LOCKBOXES                                                                        |
| 84237761     | Application |               | 10/31/2012  |            |                    | AU | Patient oriented hospital care approach and system                                                               |
| 82948272     | Granted     | 708217        | 12/31/1996  | 7/29/1999  | 1997020839         | AU | EVALUATION OF CONTENT OF A DATA SET USING MULTIPLE AND/OR COMPLEX QUERIES                                        |
| 82947748     | Granted     | 742937        | 5/8/1998    | 5/2/2002   | 1998073757         | AU | Method and System for Monitoring Call Center Service Representatives                                             |
| 84162956     | Application |               | 8/30/2012   |            | 2012387663         | AU | ENCRYPTED DATA STORE FOR RECORDS                                                                                 |
| 82579350     | Granted     | 2007234897    | 4/3/2007    | 12/17/2009 | 2007234897         | AU | Merging Multi-Line Log Entries                                                                                   |
| 84163262     | Application |               | 9/12/2012   |            | 2012387666         | AU | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                                                  |
| 84164172     | Application |               | 9/12/2012   |            | 2012387667         | AU | METADATA TREE WITH KEY ROTATION INFORMATION                                                                      |
| 82228736     | Published   |               | 1/23/2008   |            | P10806372-9        | BR | Methods for providing secure eCommerce transactions                                                              |
| 82242539     | Application |               | 3/10/2008   |            | P10821182-5        | BR | Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same                        |
| 82257872     | Published   |               | 7/24/2002   |            | 211721             | BR | Block Data Storage Within A Computer Network                                                                     |
| 82257956     | Published   |               | 5/30/2003   |            | 0311390-6          | BR | Distributed Network Storage System With Virtualization                                                           |
| 82858553     | Application |               | 4/28/2010   |            | P11007611-5        | BR | IMPROVEMENTS IN OR RELATING TO COOLING                                                                           |
| 82879815     | Application |               | 10/26/2009  |            | P10924243-0        | BR | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same                          |
| 83721312     | Application |               | 5/31/2011   |            | 1220130308164      | BR | AUTOMATED SECURITY TESTING                                                                                       |

| HP Record ID | Status       | Patent Number | Filing Date | Grant Date | Application Number  | CC | Title                                                                                                                                   |
|--------------|--------------|---------------|-------------|------------|---------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------|
| 83984192     | Application  |               | 1/6/2012    |            | 1120140167222       | BR | CONNECTOR MODULES HAVING OPTICAL CONNECTORS<br>MOVEABLE BETWEEN A RETRACTED POSITION AND AN<br>EXTENDED POSITION                        |
| 83991648     | Application  |               | 4/30/2012   |            | BR 11 2014 018142 0 | BR | AUTOMATED EVENT MANAGEMENT                                                                                                              |
| 83995811     | Application  |               | 4/20/2012   |            | 1120140181411       | BR | VOLTAGE REGULATOR CONTROL SYSTEM                                                                                                        |
| 84050557     | Application  |               | 3/30/2012   |            | 1120140237450       | BR | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE<br>FOR A VIOLATION OF THE PERIMETER                                                   |
| 84077693     | Application  |               | 6/8/2012    |            | BR1120140270864     | BR | CHECKPOINTING USING FPGA                                                                                                                |
| 84136963     | Application  |               | 7/31/2012   |            | BR1120150023231     | BR | NETWORK TRAFFIC PROCESSING SYSTEM                                                                                                       |
| 84141080     | Application  |               | 9/10/2012   |            | 1120150023193       | BR | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                                                          |
| 84162663     | Application  |               | 8/29/2012   |            | 1120150040357       | BR | SECURITY SCAN BASED ON DYNAMIC TAINT                                                                                                    |
| 84262619     | Application  |               | 1/30/2013   |            |                     | BR | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN<br>COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM                                       |
| 84290783     | Acknowledged |               | 1/30/2013   |            |                     | BR | NON-VOLATILE MEMORY WRITE MECHANISM                                                                                                     |
| 84292909     | Acknowledged |               | 1/31/2013   |            |                     | BR | LIQUID COOLING                                                                                                                          |
| 82676465     | Application  |               | 10/21/2009  |            | P10914386-6         | BR | DATA CENTER AND DATA CENTER DESIGN                                                                                                      |
| 82242569     | Published    |               | 3/11/2008   |            | P10821180-9         | BR | Optoelectronic Switches Using On-chip Optical Waveguides                                                                                |
| 84291289     | Application  |               | 1/15/2013   |            | 1120150169538       | BR | Dynamic Firmware Updating                                                                                                               |
| 83134881     | Application  |               | 6/16/2010   |            | BR1120120320033     | BR | Computer Racks                                                                                                                          |
| 82675337     | Application  |               | 11/13/2009  |            | P10916505-3         | BR | Data Centre And Apparatus And Method For Data Centre<br>Cooling                                                                         |
| 90056359     | Acknowledged |               | 4/3/2013    |            |                     | BR | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                                             |
| 82850373     | Application  |               | 4/28/2010   |            | P11007612-3         | BR | IMPROVEMENTS IN OR RELATING TO DATA CENTERS                                                                                             |
| 83784102     | Application  |               | 10/20/2011  |            | BR1120140051194     | BR | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS<br>BASED ON A REFERENCE BASELINE ACCORDING TO<br>TEMPORAL POSITION IN A SEQUENCE OF EVENTS |
| 84022135     | Application  |               | 2/22/2012   |            | 1120140207089       | BR | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM<br>ON A COMPUTER                                                                     |
| 83992763     | Application  |               | 4/25/2012   |            | 1120140186278       | BR | FILE TRANSFER USING XML                                                                                                                 |
| 83714198     | Application  |               | 5/31/2011   |            | 1120130306602       | BR | APPLICATION SECURITY TESTING                                                                                                            |
| 83728676     | Application  |               | 6/16/2011   |            | 112013032289.6      | BR | SYSTEM AND METHOD FOR POLICY GENERATION                                                                                                 |
| 83776047     | Application  |               | 7/29/2011   |            | 1120140021759       | BR | CREDENTIAL VALIDATION                                                                                                                   |
| 82238672     | Application  |               | 12/20/2007  |            | P10722218-1         | BR | AUTOMATED MODEL GENERATION FOR COMPUTER BASED<br>BUSINESS PROCESS                                                                       |
| 90051538     | Acknowledged |               | 3/29/2013   |            |                     | BR | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING<br>NODE                                                                                    |
| 84182200     | Application  |               | 9/28/2012   |            | 1120150066534       | BR | Application Security Testing                                                                                                            |

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| 82077137     | Granted     | 2258651       | 6/17/1997   | 37985      | 2258651            | CA | System, Method And Article Of Manufacture For Virtualizing Of Sale Processing Utilizing An Extensible, Flexible Architecture |
| 82077260     | Granted     | 2228014       | 7/26/1996   | 7/22/2008  | 2228014            | CA | Method And Apparatus For Operating Resources Under Control Of A Security Module Or Other Secure Processors (Amended)         |
| 82947747     | Granted     | 2289508       | 5/8/1998    | 8/22/2006  | 2289508            | CA | Method and System for Monitoring Call Center Service Representatives                                                         |
| 82948273     | Granted     | 2241873       | 12/31/1996  | 3/21/2006  | 2241873            | CA | EVALUATION OF CONTENT OF A DATA SET USING MULTIPLE AND/OR COMPLEX QUERIES                                                    |
| 82948643     | Granted     | 2290351       | 5/22/1998   | 8/23/2005  | 2290351            | CA | Virtual robot conversing with users in natural language                                                                      |
| 84162961     | Application |               | 8/30/2012   |            | 2882349            | CA | ENCRYPTED DATA STORE FOR RECORDS                                                                                             |
| 84163267     | Application |               | 9/12/2012   |            | 2881962            | CA | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                                                              |
| 84164177     | Application |               | 9/12/2012   |            | 2881983            | CA | METADATA TREE WITH KEY ROTATION INFORMATION                                                                                  |
| 84208476     | Application |               | 9/30/2012   |            | 2886577            | CA | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                                        |
| 84237765     | Application |               | 10/31/2012  |            | 2890071            | CA | VISUAL CALL APPARATUS AND METHOD                                                                                             |
| 84078875     | Application |               | 6/8/2012    |            | 2871845            | CA | PATIENT INFORMATION INTERFACE                                                                                                |
| 84122539     | Application |               | 6/29/2012   |            | 2877940            | CA | CAPACITY PLANNING SYSTEM                                                                                                     |
| 82271714     | Granted     | 2361895       | 11/30/2000  | 40281      | 2361895            | CA | FIFO Based Network Interface Supporting Out-of-Order Processing                                                              |
| 82237991     | Granted     | 2460833       | 9/20/2002   | 2/26/2013  | 2460833            | CA | SYSTEM AND METHOD FOR IMPLEMENTING JOURNALING IN A MULTI-NODE ENVIRONMENT                                                    |
| 84164244     | Application |               | 9/19/2012   |            | 2881985            | CA | METADATA TREE OF A PATIENT WITH LOCKBOXES                                                                                    |
| 82579290     | Granted     | 2565343       | 5/4/2005    | 41289      | 2565343            | CA | Pattern Discovery In A Network Security System                                                                               |
| 82251347     | Granted     | 2572568       | 12/29/2006  | 6/17/2014  | 2572568            | CA | Seamless Roaming Across Wireless Subnets Using Source Address Forwarding                                                     |
| 82077350     | Granted     | 2252649       | 4/24/1997   | 8/6/2002   | 2252649            | CA | A System And Method For Secure Network Electronic Payment And Credit Collection                                              |
| 82579387     | Granted     | 2660054       | 10/25/2007  | 3/19/2013  | 2660054            | CA | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security             |
| 82579293     | Granted     | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2          | CH | Pattern Discovery In A Network Security System                                                                               |
| 82274711     | Application |               | 11/7/2003   |            | 2290/2003          | CL | Active Network Defense System and Method                                                                                     |
| 82043042     | Granted     | ZL98814012.8  | 12/17/1998  | 2/2/2005   | 98814012.8         | CN | Tape Leader Pin Assembly And Method For Making The Same                                                                      |
| 82066838     | Granted     | 97190020.5    | 1/17/1997   | 38469      | 97190020.5         | CN | OFDM FEC                                                                                                                     |

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| 82092674     | Granted | 200410074858.9 | 8/30/2004   | 9/8/2010   | 200410074858.9     | CN | High Performance Cooling Device With Vapor Chamber                                                                    |
| 82106546     | Granted | 200580030087.6 | 8/30/2005   | 11/28/2012 | 200580030087.6     | CN | Scalable, Component-accessible, And Highly Interconnected Three-dimensional Component Arrangement Within A System     |
| 82133579     | Granted | 809364.4       | 6/23/2000   | 7/14/2004  | 809364.4           | CN | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS               |
| 82163993     | Granted | 96111970.5     | 8/30/1996   | 5/26/2004  | 96111970.5         | CN | Distributed Interactive Multimedia Service System                                                                     |
| 82168916     | Granted | 200410003586.3 | 1/30/2004   | 6/8/2011   | 200410003586.3     | CN | Multiple Protocol Database                                                                                            |
| 82169165     | Granted | 200310120285.4 | 12/12/2003  | 4/29/2009  | 200310120285.4     | CN | Apparatus And Method For Telecommunications Services                                                                  |
| 82170170     | Granted | 200410087955.1 | 10/27/2004  | 1/27/2010  | 200410087955.1     | CN | Method And Program Product For Avoiding Cache Congestion By Offsetting Addresses While Allocating Memory              |
| 82171169     | Granted | 200680038674.4 | 7/21/2006   | 1/16/2013  | 200680038674.4     | CN | Quantum Information Conversion Between Matter And Light Representations                                               |
| 82171679     | Granted | 200510004156.8 | 1/12/2005   | 2/24/2010  | 200510004156.8     | CN | Signaling Gateway Aggregation                                                                                         |
| 82174148     | Granted | 200580013632   | 4/28/2005   | 9/8/2010   | 200580013632       | CN | Quantum Optical State Converter                                                                                       |
| 82176401     | Granted | 200410064418.5 | 8/24/2004   | 5/5/2010   | 200410064418.5     | CN | Interface Module                                                                                                      |
| 82178210     | Granted | 200510071785.2 | 4/5/2005    | 4/18/2012  | 200510071785.2     | CN | Key-configured Topology With Connection Management                                                                    |
| 82179029     | Granted | 200580011521.6 | 2/17/2005   | 2/24/2010  | 200580011521.6     | CN | Airflow Detection System Having An Airflow Indicating Device                                                          |
| 82179644     | Granted | 200510068591.7 | 4/27/2005   | 10/1/2008  | 200510068591.7     | CN | System And Method For Interleaving Memory                                                                             |
| 82182605     | Granted | 200580009400.8 | 1/28/2005   | 5/12/2010  | 200580009400.8     | CN | Determining Location Information For A Node In A Network Using At Least One Local Landmark Node                       |
| 82184279     | Granted | 200510089523.9 | 7/22/2005   | 1/21/2009  | 200510089523.9     | CN | Programmable SYNC Pulse Generator                                                                                     |
| 82185335     | Granted | 200580013868.4 | 4/25/2005   | 4/29/2009  | 200580013868.4     | CN | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures                               |
| 82186010     | Granted | 200680050237.4 | 11/1/2006   | 11/14/2012 | 200680050237.4     | CN | CROSSBAR-ARRAY AND WIRE ADDRESSING METHODS THAT TOLERATE MISALIGNMENT OF ELECTRICAL COMPONENTS AT WIRE OVERLAP POINTS |
| 82186196     | Granted | 200580015681.8 | 5/13/2005   | 5/4/2011   | 200580015681.8     | CN | Improvements In Message-based Communications                                                                          |
| 82188080     | Granted | 200510086014   | 7/20/2005   | 6/16/2010  | 200510086014       | CN | REDUNDANT PROCESSOR SYSTEM, TIME OF DAY RESPONSE SYSTEM, AND METHOD FOR RESPONDING TO A TIME OF DAY REQUEST           |
| 82188089     | Granted | 200510127159   | 11/16/2005  | 12/10/2008 | 200510127159       | CN | Computer System Synchronization Unit Configured For Race Avoidance (as Amended), Per F/A Letter Of 01/19/08.          |
| 82188647     | Granted | 200580013328.6 | 4/28/2005   | 9/14/2011  | 200580013328.6     | CN | NON-DEMOLITION PHOTON DETECTOR THAT PRESERVES INPUT STATE CHARACTERISTICS                                             |

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| 82189259     | Granted   | 200510087497.6   | 7/19/2005   | 10/1/2008  | 200510087497.6     | CN | Latent Error Detection                                                                                                                             |
| 82189406     | Granted   | 200510088110.9   | 7/29/2005   | 6/10/2009  | 200510088110.9     | CN | System And Method For Operating Load Balancers For Multiple Instance Applications                                                                  |
| 82189832     | Granted   | 200510118826.9   | 10/28/2005  | 12/8/2010  | 200510118826.9     | CN | Systems And Methods For Presenting Managed Data                                                                                                    |
| 82189946     | Granted   | ZL200510088230.9 | 7/29/2005   | 4/22/2015  | 200510088230.9     | CN | Purging Without Write-back Of Cache Lines Containing Data                                                                                          |
| 82190210     | Granted   | 200510088159.4   | 7/29/2005   | 5/13/2009  | 200510088159.4     | CN | Run-time Updating Of Prediction Hint Instructions                                                                                                  |
| 82195694     | Granted   | 200610003753.3   | 2/5/2006    | 8/13/2014  | 200610003753.3     | CN | Selecting A Function Of Components Based On Orientation                                                                                            |
| 82196585     | Granted   | 200610004179.3   | 2/23/2006   | 7/27/2011  | 200610004179.3     | CN | Methods And Systems For Managing A Device                                                                                                          |
| 82197392     | Granted   | 200510137045.4   | 12/9/2005   | 5/18/2011  | 200510137045.4     | CN | Distributed Lock                                                                                                                                   |
| 82197884     | Published |                  | 5/17/2006   |            | 200610084701.3     | CN | Controlling Access To Communication Services                                                                                                       |
| 82199933     | Granted   | 200610005412.x   | 1/12/2006   | 12/2/2009  | 200610005412.X     | CN | Apparatus For Data Retrieval From Computing Systems                                                                                                |
| 82200080     | Granted   | 200580037003.1   | 10/14/2005  | 40807      | 200580037003.1     | CN | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
|              |           |                  |             |            |                    |    |                                                                                                                                                    |
| 82200689     | Granted   | ZL200580047837.0 | 10/31/2005  | 11/6/2013  | 200580047837       | CN | Routing A Service Query In An Overlay Network                                                                                                      |
|              |           |                  |             |            |                    |    |                                                                                                                                                    |
| 82201370     | Granted   | 200510118887.5   | 11/1/2005   | 9/17/2008  | 200510118887.5     | CN | Incremental Backup Operations In Storage Networks                                                                                                  |
| 82202759     | Granted   | 200610084112.5   | 5/23/2006   | 6/2/2010   | 200610084112.5     | CN | Systems And Methods Of Sharing Removable Media Storage Devices In Multi-partitioned Systems                                                        |
| 82205870     | Granted   | 200580047845.5   | 10/31/2005  | 10/27/2010 | 200580047845.5     | CN | Determining Highest Workloads For Nodes In An Overlay Network                                                                                      |
| 82205885     | Granted   | 200580047830.9   | 12/6/2005   | 4/6/2011   | 200580047830.9     | CN | Splitting A Workload Of A Node                                                                                                                     |
| 82206305     | Granted   | 200680009455.3   | 3/9/2006    | 9/29/2010  | 200680009455.3     | CN | Embedded Web-based Management Method                                                                                                               |
| 82207013     | Granted   | ZL200680002826.5 | 1/19/2006   | 1/9/2013   | 200680002826.5     | CN | TRANSACTION PROXY IN A TELECOMMUNICATIONS OR MESSAGING SYSTEM AND RELATED METHODS                                                                  |
| 82209062     | Granted   | 200580000213.3   | 3/10/2005   | 2/24/2010  | 200580000213.3     | CN | Server System, Server Device And Method Therefor                                                                                                   |
| 82209572     | Granted   | 200780037838.6   | 10/12/2007  | 2/13/2013  | 200780037838.6     | CN | Composite Material With Chirped Resonant Cells                                                                                                     |
| 82210010     | Granted   | 200680038219.4   | 8/7/2006    | 3/14/2012  | 200680038219.4     | CN | Screening Of Calls In A Packet-based Network                                                                                                       |
| 82211858     | Granted   | 200680040428.2   | 7/20/2006   | 7/25/2012  | 200680040428.2     | CN | Service Chaining                                                                                                                                   |
| 82211876     | Granted   | 200680040321.8   | 7/20/2006   | 7/4/2012   | 200680040321.8     | CN | Telephony And Web Services Coordination                                                                                                            |
| 82213688     | Granted   | 200710001855.6   | 1/5/2007    | 12/1/2010  | 200710001855.6     | CN | DMA Access Systems And Methods                                                                                                                     |
| 82216115     | Granted   | 200780004162     | 1/30/2007   | 9/5/2012   | 200780004162       | CN | Methods And Systems For Avoiding Transmission-channel Disruptions                                                                                  |
| 82217414     | Granted   | 200780026095.2   | 7/10/2007   | 7/4/2012   | 200780026095.2     | CN | METHOD OF PROVIDING SERVICES IN A NETWORK, NETWORK ELEMENT                                                                                         |
| 82218863     | Published |                  | 7/26/2007   |            | 200710137000.6     | CN | Memory-mapped Buffers For Network Interface Controllers                                                                                            |
| 82219115     | Granted   | 200780028366.8   | 7/11/2007   | 1/26/2011  | 200780028366.8     | CN | Compact Systems For Generating Polarization-entangled Photons                                                                                      |

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| 82219238     | Granted     | 200780035137.9   | 7/11/2007   | 41227      | 200780035137.9     | CN | Compact, Single-chip-based, Entangled Polarization-state Photon Sources And Methods For Generating Photons In Entangled Polarization States |
| 82220747     | Granted     | ZL200780036203.4 | 7/17/2007   | 3/6/2013   | 200780036203.4     | CN | SECURE USE OF USER SECRETS ON A COMPUTING PLATFORM                                                                                          |
| 82224158     | Granted     | 200880013724.2   | 4/25/2008   | 1/11/2012  | 200880013724.2     | CN | Nanowire-based Opto-electronic Devices                                                                                                      |
| 82225670     | Granted     | 200780023368.8   | 4/20/2007   | 8/3/2011   | 200780023368.8     | CN | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                                         |
| 82225724     | Granted     | 200780046608.6   | 10/16/2007  | 11/16/2011 | 200780046608.6     | CN | PHOTONIC-INTERCONNECT SYSTEMS FOR READING DATA FROM MEMORY CELLS AND WRITING DATA TO MEMORY INTEGRATED CIRCUITS                             |
| 82226597     | Granted     | 200880013624.X   | 4/25/2008   | 5/9/2012   | 200880013624.X     | CN | A MICROCHIP HAVING ACTIVE TEMPERATURE CONTROL AND A METHOD FOR MAKING THE SAME                                                              |
| 82226990     | Granted     | 200880002010.1   | 1/10/2008   | 9/14/2011  | 200880002010.1     | CN | CAPACITIVELY COUPLING LAYERS OF A MULTILAYER DEVICE                                                                                         |
| 82227032     | Granted     | 200880007016.8   | 1/3/2008    | 10/5/2011  | 200880007016.8     | CN | Photonic Systems And Methods For Encoding Data In Carrier Electromagnetic Waves                                                             |
| 82227608     | Granted     | 200880019398.6   | 4/4/2008    | 10/16/2013 | 200880019398.6     | CN | APPARATUS AND METHODS FOR ADAPTIVE THROTTLING OF TRAFFIC ACROSS MULTIPLE NETWORK NODES                                                      |
| 82228733     | Published   |                  | 1/23/2008   |            | 200880003343.5     | CN | METHODS FOR PROVIDING SECURE Ecommerce TRANSACTIONS                                                                                         |
| 82229591     | Granted     | ZL200880003529.1 | 1/29/2008   | 3/5/2014   | 200880003529.1     | CN | Method And System For Facilitating Multi-point Communications                                                                               |
| 82229783     | Published   |                  | 1/29/2008   |            | 200880003636.4     | CN | CONFIGURATION OF MOBILE COMMUNICATION DEVICES                                                                                               |
| 82229975     | Granted     | 200880023685.4   | 5/21/2008   | 8/21/2013  | 200880023685.4     | CN | END-TO-END FLOW CONTROL IN A NETWORK BACKGROUND                                                                                             |
| 82230473     | Application |                  | 10/25/2007  |            | 200780101502.1     | CN | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                                     |
| 82230548     | Granted     | 200880021050     | 6/16/2008   | 11/14/2012 | 200880021050       | CN | Optical Interconnect                                                                                                                        |
| 82231412     | Application |                  | 8/28/2007   |            | 200780100071.7     | CN | Method And Apparatus For Multimedia Data Management On Mobile Devices                                                                       |
| 82231481     | Granted     | ZL200880114798.5 | 9/3/2008    | 1/16/2013  | 200880114798.5     | CN | Sharing Legacy Devices In A Multi-host Environment                                                                                          |
| 82231835     | Granted     | 200880025176.5   | 5/21/2008   | 41150      | 200880025176.5     | CN | A Modular High-density Computer System                                                                                                      |
| 82232486     | Granted     | 200880101515.3   | 7/30/2008   | 7/10/2013  | 200880101515.3     | CN | Photonic Guiding Device                                                                                                                     |
| 82233023     | Granted     | ZL200880113939.1 | 9/19/2008   | 3/27/2013  | 200880113939.1     | CN | Hardware Device Interface Supporting Transaction Authentication                                                                             |
| 82233107     | Granted     | 101689070        | 5/21/2008   | 12/19/2012 | 200880022038.1     | CN | Dynamic Converter Control For Efficient Operation                                                                                           |
| 82233146     | Granted     | ZL200880127260.8 | 2/20/2008   | 3/20/2013  | 200880127260.8     | CN | Redriver With Two Reference Clocks And Method Of Operation Thereof                                                                          |

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| 82233290     | Granted   | ZL2007/80101503.6 | 10/25/2007  | 6/12/2013  | 200780101503.6     | CN | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                     |
| 82233404     | Granted   | 200810129477.4    | 7/31/2008   | 6/27/2012  | 200810129477.4     | CN | Cell Compatibility In Multiprocessor Systems                                                                |
| 82234604     | Granted   | 200880112448.5    | 10/15/2008  | 10/30/2013 | 200880112448.5     | CN | METHOD AND SYSTEM OF TRACKING OPTICAL BEAM SHIFTS                                                           |
| 82234667     | Granted   | 200880022465.X    | 6/25/2008   | 4/6/2011   | 200880022465.X     | CN | Nanowire Photodiodes And Methods Of Making Nanowire Photodiodes                                             |
| 82234976     | Granted   | 200880101543.5    | 7/30/2008   | 7/25/2012  | 200880101543.5     | CN | Microresonator Systems And Methods Of Fabricating The Same                                                  |
| 82235045     | Granted   | ZL200880122362.0  | 10/23/2008  | 12/26/2012 | 200880122362       | CN | All Optical Fast Distributed Arbitration In A Computer System                                               |
| 82235162     | Granted   | 200880112331.7    | 10/15/2008  | 12/19/2012 | 200880112331.7     | CN | PLASMONIC HIGH-SPEED DEVICES FOR ENHANCING THE PERFORMANCE OF MICROELECTRONIC DEVICES                       |
| 82235420     | Allowed   |                   | 1/31/2008   |            | 200880125960.3     | CN | Automated Application Dependency Mapping                                                                    |
| 82237025     | Granted   | ZL2007/80102380.8 | 12/20/2007  | 5/29/2013  | 200780102380.8     | CN | MODEL BASED DEPLOYMENT OF COMPUTER BASED BUSINESS PROCESS ON DEDICATED HARDWARE                             |
| 82237604     | Published |                   | 3/14/2008   |            | 200880128059.1     | CN | Blade Server For Increased Processing Capacity                                                              |
| 82237847     | Granted   | 200880129886.2    | 4/19/2008   | 6/11/2014  | 200880129886.2     | CN | Device And Method For Cooling Fan Control Using Measured Amperage Load.                                     |
| 82238015     | Granted   | 2823098.1         | 9/20/2002   | 39141      | 2823098.1          | CN | SYSTEM AND METHOD FOR IMPLEMENTING JOURNALING IN A MULTI-NODE ENVIRONMENT                                   |
| 82238162     | Granted   | 200880128904.5    | 4/28/2008   | 6/11/2014  | 200880128904.5     | CN | Adjustable Server-transmission Rates Over Fixed-speed Backplane Connections Within A Multi-server Enclosure |
| 82238201     | Granted   | 2007/80102031.6   | 12/21/2007  | 10/31/2012 | 200780102031.6     | CN | Moisture Content Control System                                                                             |
| 82238537     | Granted   | 200880126070.4    | 1/30/2008   | 2/29/2012  | 200880126070.4     | CN | NANOSTRUCTURES AND METHODS OF MAKING THE SAME                                                               |
| 82238648     | Granted   | 200880125785.8    | 1/28/2008   | 6/12/2013  | 200880125785.8     | CN | DEPLOYMENT OF BOOT IMAGES IN DISKLESS SERVERS                                                               |
| 82239092     | Granted   | ZL200880128467.7  | 4/2/2008    | 4/2/2014   | 200880128467.7     | CN | Disk Drive Data Encryption                                                                                  |
| 82239455     | Granted   | 200880126069.1    | 1/30/2008   | 9/18/2013  | 200880126069.1     | CN | PLASMON ENHANCED LIGHT-EMITTING DIODES                                                                      |
| 82240262     | Granted   | ZL200880128456.9  | 3/31/2008   | 8/6/2014   | 200880128456.9     | CN | Automated Power Topology Discovery                                                                          |
| 82240574     | Published |                   | 2/26/2008   |            | 200880127555.5     | CN | Improved Fan And Cooling Device                                                                             |
| 82240655     | Granted   | ZL200880127836.0  | 3/3/2008    | 8/21/2013  | 200880127836       | CN | Software-based Power Capping                                                                                |
| 82240721     | Granted   | 200880129257.X    | 4/1/2008    | 41402      | 200880129257.X     | CN | Cooling Provisioning Management In A Three Dimensional Package                                              |
| 82240829     | Allowed   |                   | 4/30/2008   |            | 200880128923.8     | CN | POWER SUPPLY ASSEMBLY FOR SERVER RACK AND METHOD FOR MOUNTING POWER SUPPLY FOR SERVER RACK                  |
| 82241459     | Granted   | ZL200880128466.2  | 4/2/2008    | 3/27/2013  | 200880128466.2     | CN | Converting Resets In Shared I/O System                                                                      |

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| 82241594     | Granted   | 200880128884.1   | 4/28/2008   | 41801      | 200880128884.1     | CN | Virtual-Interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                                         |
| 82241885     | Granted   | 200880127845.X   | 3/4/2008    | 7/31/2013  | 200880127845.X     | CN | ANGLE SENSOR, SYSTEM AND METHOD EMPLOYING GUIDED MODE RESONANCE (as amended)                                           |
| 82242092     | Published |                  | 2/15/2008   |            | 200880126794.9     | CN | METHOD AND COMPUTER PROGRAM PRODUCT FOR CHANGING AN IT SYSTEM                                                          |
| 82242212     | Granted   | 200880128442.7   | 3/28/2008   | 3/13/2013  | 200880128442.7     | CN | FLEXIBLE OPTICAL INTERCONNECT                                                                                          |
| 82242413     | Granted   | ZL200880113950.8 | 10/14/2008  | 41542      | 200880113950.8     | CN | QUANTUM KEY DISTRIBUTION SYSTEM USING LDPC CODES WITH A GRAPH HAVING A TOROID STRUCTURE                                |
| 82242572     | Granted   | 200880129150.5   | 3/11/2008   | 3/27/2013  | 200880129150.5     | CN | Optoelectronic Switches Using On-chip Optical Waveguides                                                               |
| 82242650     | Granted   | 200880128556.1   | 4/4/2008    | 5/7/2014   | 200880128556.1     | CN | BEAMSPLITTERS WITH OFFSET COMPENSATION                                                                                 |
| 82242707     | Published |                  | 5/1/2008    |            | 200880128994.8     | CN | Storing Checkpoint Data In Non-volatile Memory                                                                         |
| 82242905     | Published |                  | 6/23/2008   |            | 200880129914       | CN | Spatial Querying In A Data Warehouse                                                                                   |
| 82244900     | Granted   | ZL200880129888.1 | 6/19/2008   | 42123      | 200880129888.1     | CN | Capacity Planning                                                                                                      |
| 82245320     | Published |                  | 5/7/2008    |            | 200880129048.5     | CN | ARRAYS, SYSTEM AND METHOD FOR BI-DIRECTIONAL DATA TRANSMISSION                                                         |
| 82245575     | Published |                  | 7/3/2008    |            | 200880130190.1     | CN | Memory Server                                                                                                          |
| 82247450     | Granted   | 200880128042.6   | 9/29/2008   | 41444      | 200880128042.6     | CN | Neuromorphic Circuit                                                                                                   |
| 82247825     | Published |                  | 5/6/2008    |            | 200880129130.8     | CN | FABRICATION OF THIN PELLICLE BEAM SPLITTERS                                                                            |
| 82250324     | Granted   | ZL201010171578.5 | 4/28/2010   | 12/10/2014 | 201010171578.5     | CN | Communicating Confidential Information Between An Application And A Database                                           |
| 82251524     | Granted   | 96192069.6       | 2/12/1996   | 40212      | 96192069.6         | CN | System And Method For Electronic Transfer Of Funds Using An Automated Teller Machine To Dispense The Transferred Funds |
| 82257521     | Granted   | 200980112505.4   | 4/10/2008   | 4/29/2015  | 200980112505.4     | CN | APPARATUS, AND ASSOCIATED METHOD, FOR ALLOCATING PROCESSING AMONGST DATA CENTERS                                       |
| 82257623     | Granted   | 200980117601.8   | 7/29/2008   | 12/17/2014 | 200980117601.8     | CN | SYSTEM AND METHOD FOR A VIRTUALIZATION INFRASTRUCTURE MANAGEMENT ENVIRONMENT                                           |
| 82257749     | Granted   | 200980117583.3   | 7/24/2008   | 2/11/2015  | 200980117583.3     | CN | System And Method For Electronic Data Security                                                                         |
| 82257950     | Granted   | 3815013.1        | 5/30/2003   | 9/26/2007  | 3815013.1          | CN | Distributed Network Storage System With Virtualization                                                                 |
| 82274417     | Granted   | 200410011437.1   | 12/22/2004  | 3/21/2012  | 200410011437.1     | CN | Stackable Routers Employing a Routing Protocol                                                                         |
| 82274735     | Granted   | 200380104709.6   | 11/7/2003   | 12/17/2008 | 200380104709.6     | CN | Active Network Defense System and Method                                                                               |
| 82274813     | Published |                  | 1/26/2007   |            | 200710008176.1     | CN | Bi-planar Network Architecture                                                                                         |
| 82274849     | Published |                  | 2/16/2007   |            | 200710084120.4     | CN | Network Traffic Redirection in Bi-Planar Networks                                                                      |
| 82274981     | Granted   | 101826970        | 1/5/2010    | 42046      | 201010002121.1     | CN | Intelligent Power Management of an Intermediate Network Device Switching Circuitry and PoE Delivery                    |
| 82274987     | Granted   | 201010114339.6   | 2/20/2010   | 42109      | 201010114339.6     | CN | POWER SHARING WITH STACKABLE SWITCHES                                                                                  |
| 82400880     | Granted   | 200880129889.6   | 6/19/2008   | 3/27/2013  | 200880129889.6     | CN | Multi-blade Interconnector                                                                                             |
| 82405520     | Granted   | 200880129455.6   | 5/28/2008   | 6/11/2014  | 200880129455.6     | CN | Impedance Correction                                                                                                   |

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| 82405575     | Granted   | ZL200880130273.0 | 5/9/2008    | 4/22/2015  | 200880130273       | CN | Optically Enabled Broadcast Bus                                                                                                             |
| 82405604     | Granted   | ZL200880130271.1 | 5/8/2008    | 7/16/2014  | 200880130271.1     | CN | Hierarchical Passive Networks                                                                                                               |
| 82408609     | Granted   | ZL200880129454.1 | 5/28/2008   | 12/10/2014 | 200880129454.1     | CN | Providing Object-level Input/output Requests Between Virtual Machines To Access A Storage Subsystem                                         |
| 82559526     | Granted   | ZL200880130675.0 | 6/10/2008   | 4/8/2015   | 200880130675       | CN | Presenting Multi-function Devices Behind A Switch Hierarchy As A Single Function Device                                                     |
| 82573372     | Granted   | 200880129869.9   | 6/17/2008   | 11/19/2014 | 200880129869.9     | CN | Optical Broadcast Systems And Methods                                                                                                       |
| 82573377     | Published |                  | 6/17/2008   |            | 200880129891.3     | CN | Infrastructure System Management Based Upon Evaluated Reliability                                                                           |
| 82576590     | Granted   | ZL200880130177.6 | 7/1/2008    | 10/23/2013 | 200880130177.6     | CN | Remote Computing Services                                                                                                                   |
| 82576818     | Granted   | 200880130654.9   | 6/9/2008    | 41094      | 200880130654.9     | CN | Cylindrical Resonators For Optical Signal Routing                                                                                           |
| 82584155     | Granted   | ZL200980131239.X | 8/4/2009    | 2/13/2013  | 200980131239.X     | CN | BOOKMARKS FOR FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                                                              |
| 82584161     | Granted   | ZL200980131791.9 | 8/4/2009    | 5/21/2014  | 200980131791.9     | CN | APPARATUS, AND ASSOCIATED METHOD, FOR DETECTING FRAUDULENT TEXT MESSAGE                                                                     |
| 82595662     | Granted   | ZL200880130434.6 | 7/14/2008   | 7/2/2014   | 200880130434.6     | CN | Hybrid Guided-Mode Resonance Filter And Method Employing Distributed Bragg Reflection                                                       |
| 82620376     | Published |                  | 8/8/2008    |            | 200880131474.2     | CN | Method And Systems For Implementing High-radix Switch Topologies On Relatively Lower-radix Switch Physical Networks                         |
| 82621147     | Granted   | ZL200880131469.1 | 8/8/2008    | 3/12/2014  | 200880131469.1     | CN | Independently Controlled Virtual Memory Devices In Memory Modules                                                                           |
| 82629482     | Granted   | ZL200880131477.6 | 8/8/2008    | 42144      | 200880131477.6     | CN | Independently Controllable And Reconfigurable Virtual Memory Devices In Memory Modules That Are Pin-compatible With Standard Memory Modules |
| 82629542     | Published |                  | 8/13/2008   |            | 200880131533.6     | CN | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                        |
| 82631729     | Granted   | ZL200980139998.0 | 8/4/2009    | 4/9/2014   | 200980139998       | CN | End-to-end Network Access Analysis                                                                                                          |
| 82634144     | Granted   | ZL200880130883.0 | 8/26/2008   | 42221      | 200880130883       | CN | Tunable Nanowire Resonant Cavity For Optical Modulation                                                                                     |
| 82634167     | Granted   | 200880130870.3   | 8/27/2008   | 1/28/2015  | 200880130870.3     | CN | Dynamic Impedance Receiver Circuit For Ultrafast Low-power Photodetector                                                                    |
| 82651064     | Published |                  | 8/30/2008   |            | 200880130894.9     | CN | Use Of Hybrid PCB Materials In Printed Circuit Boards                                                                                       |
| 82651130     | Granted   | ZL200980143332.2 | 9/23/2009   | 6/17/2015  | 200980143332.2     | CN | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                                                                                  |
| 82653584     | Published |                  | 9/22/2009   |            | 200980143341.1     | CN | DIFFERENTIAL ON-LINE TERMINATION                                                                                                            |

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| 82654463     | Published   |                  | 8/27/2008   |            | 200880131724.2     | CN | Performing Zone Based Workload Scheduling According Environmental Conditions                       |
| 82660019     | Granted     | ZL200880132252.2 | 10/7/2008   | 42186      | 200880132252.2     | CN | Analyzing Events                                                                                   |
| 82660093     | Allowed     |                  | 10/28/2009  |            | 200980145140.5     | CN | Distributed Packet Flow Inspection and Processing                                                  |
| 82672024     | Granted     | ZL200880131794.8 | 10/29/2008  | 9/17/2014  | 200880131794.8     | CN | Component Installation Guidance                                                                    |
| 82672072     | Granted     | ZL200880131478.0 | 10/8/2008   | 41990      | 200880131478       | CN | Firmware Storage Medium With Customized Image                                                      |
| 82675564     | Allowed     |                  | 10/13/2008  |            | 200880131557.1     | CN | Trend Determination And Identification                                                             |
| 82676603     | Published   |                  | 10/16/2008  |            | 200880132377.5     | CN | Performance Analysis Of Applications                                                               |
| 82691755     | Published   |                  | 9/4/2009    |            | 200980144159.8     | CN | Storing Log Data Efficiently While Supporting Querying                                             |
| 82716517     | Published   |                  | 10/30/2008  |            | 200880131800.X     | CN | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                               |
| 82716724     | Granted     | ZL200880132583.6 | 10/31/2008  | 42116      | 200880132583.6     | CN | Optical Beam Couplers And Splitters                                                                |
| 82752233     | Granted     | ZL200980155140.3 | 1/23/2009   | 42060      | 200980155140.3     | CN | System And Methods For Allocating Shared Storage Resources                                         |
| 82790100     | Granted     | ZL200980157956.X | 1/9/2009    | 5/14/2014  | 200980157956.X     | CN | SYSTEM AND METHODS FOR ROUTING OPTICAL SIGNALS                                                     |
| 82808640     | Granted     | ZL200980158440.7 | 1/30/2009   | 4/29/2015  | 200980158440.7     | CN | Dynamically Applying A Control Policy To A Network                                                 |
| 82819008     | Granted     | 200980158448.3   | 3/31/2009   | 1/22/2014  | 200980158448.3     | CN | Determiningpower Topology Of Plurality Of Computer Systems                                         |
| 82837339     | Published   |                  | 6/25/2009   |            | 200980160063       | CN | SWITCHABLE JUNCTION WITH INTRINSIC DIODES WITH DIFFERENT SWITCHING THRESHOLDS                      |
| 82840834     | Application |                  | 3/13/2009   |            | 200980158747.7     | CN | Determining Status Assignments That Optimize Entity Utilization And Resurce Power Consumption      |
| 82849081     | Granted     | 102396030B       | 4/17/2009   | 41941      | 200980158696.8     | CN | Method And System For Reducing Trace Length And Capacitance In A Large Memory Footprint Background |
| 82850375     | Granted     | ZL201080018945.6 | 4/28/2010   | 42214      | 201080018945.6     | CN | IMPROVEMENTS IN OR RELATING TO DATA CENTERS                                                        |
| 82852387     | Published   |                  | 7/14/2009   |            | 200980160657.1     | CN | Determining A Seasonal Effect In Temporal Data                                                     |
| 82852864     | Published   |                  | 7/31/2009   |            | 200980161741.5     | CN | Method And System To Recognize And Inventory Applications                                          |
| 82852876     | Allowed     |                  | 10/26/2009  |            | 200980161148       | CN | Automatic Redundant Logical Connections                                                            |
| 82852977     | Published   |                  | 4/13/2009   |            | 200980158681.1     | CN | Back Drill Verification Feature                                                                    |
| 82853054     | Published   |                  | 4/27/2009   |            | 200980158980.5     | CN | Energy-efficient Standby Mode In A Switching Power Supply                                          |
| 82853111     | Published   |                  | 12/18/2009  |            | 200980163034.X     | CN | Proxy Agents In A Network                                                                          |

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| 82833970     | Granted   | ZL20098015878.1  | 4/17/2009   | 41801      | 20098015878.1      | CN | Power Capping System And Method                                                                      |
| 82858555     | Granted   | ZL201080018933.3 | 4/28/2010   | 41983      | 201080018933.3     | CN | IMPROVEMENTS IN OR RELATING TO COOLING                                                               |
| 82859766     | Granted   | ZL200980158981.X | 4/27/2009   | 7/1/2015   | 200980158981.X     | CN | Electric Power Conversion System Having An Adaptable Transformer Turns Ratio For Improved Efficiency |
| 82866201     | Granted   | ZL200980160427.5 | 7/10/2009   | 4/29/2015  | 200980160427.5     | CN | Location Determined Network Access                                                                   |
| 82873383     | Granted   | 200980160198.7   | 6/29/2009   | 9/24/2014  | 200980160198.7     | CN | HYPERVERSOR-BASED MANAGEMENT OF LOCAL AND REMOTE VIRTUAL MEMORY PAGES                                |
| 82879620     | Published |                  | 4/28/2009   |            | 200980159483.7     | CN | ANGLED COUPLING FOR OPTICAL FIBERS                                                                   |
| 82879672     | Granted   | ZL200980160192.X | 4/30/2009   | 7/15/2015  | 200980160192.X     | CN | OPTICAL APPARATUS, SYSTEM AND METHOD EMPLOYING AN ENDOHEDRAL METALLOFULLERENE                        |
| 82884775     | Published |                  | 5/6/2009    |            | 200980160336.1     | CN | BUS-BASED SCALABLE OPTICAL FABRICS                                                                   |
| 82884861     | Allowed   |                  | 5/15/2009   |            | 200980160442.X     | CN | A Method And Apparatus For Policy Enforcement Using A Tag                                            |
| 82885912     | Published |                  | 6/18/2009   |            | 200980159933.2     | CN | PROCESSOR TOPOLOGY SWITCHES                                                                          |
| 82891330     | Granted   | ZL200980159966.7 | 6/19/2009   | 42193      | 200980159966.7     | CN | Drive Carrier With Pivoting Handle                                                                   |
| 82892224     | Published |                  | 7/24/2009   |            | 200980160604.X     | CN | Virtual-machine-based Application-service Provision                                                  |
| 82892350     | Allowed   |                  | 6/19/2009   |            | 200980159965.2     | CN | Enclosure Power Controller                                                                           |
| 82892392     | Published |                  | 7/17/2009   |            | 200980160522.5     | CN | Virtual Hot Inserting Functions In A Shared I/O Environment                                          |
| 82901630     | Granted   | ZL200980161182.8 | 8/31/2009   | 42109      | 200980161182.8     | CN | SURFACE-MOUNT TECHNOLOGY (SMT) DEVICE CONNECTOR                                                      |
| 82901713     | Published |                  | 2/26/2010   |            | 201080064656.X     | CN | MIXED-FLOW DUCTED FAN                                                                                |
| 82904501     | Granted   | ZL200980161621.5 | 9/25/2009   | 11/5/2014  | 200980161621.5     | CN | MAPPING NON-PREFETCHABLE STORAGE LOCATIONS INTO MEMORY MAPPED INPUT/OUTPUT SPACE                     |
| 82919351     | Granted   | ZL200980160840.1 | 8/11/2009   | 42214      | 200980160840.1     | CN | Online Search Base On Geography Tagged Recommendations                                               |
| 82922734     | Allowed   |                  | 7/17/2009   |            | 200980160995.5     | CN | NON-PERIODIC GRATING REFLECTORS WITH FOCUSING POWER AND METHODS FOR FABRICATING THE SAME             |
| 82923467     | Granted   | 200980160660.3   | 7/30/2009   | 3/25/2015  | 200980160660.3     | CN | Constructing A Bayesian Network Based On Received Events Associated With Network Entities            |
| 82924268     | Published |                  | 2/1/2010    |            | 201080039078.4     | CN | Deep Sleep Mode Management For A Network Switch                                                      |
| 82925923     | Allowed   | 201180003837.6   | 1/27/2011   | 6/10/2015  | 201180003837.6     | CN | Interface Methods And Apparatus For Memory Devices                                                   |
| 82925997     | Allowed   |                  | 7/31/2009   |            | 200980160706.1     | CN | PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS                                               |
| 82926252     | Granted   | 200980160967.3   | 9/18/2009   | 12/17/2014 | 200980160967.3     | CN | LIGHT-EMITTING DIODE INCLUDING A METAL-DIELECTRIC-METAL STRUCTURE                                    |

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| 82928809     | Published |                  | 1/29/2010   |            | 201080062553.X     | CN | Configuration Of Network Links In A Virtual Connection Environment                                                        |
| 82929722     | Allowed   |                  | 1/27/2011   |            | 201180005519.3     | CN | Memory Access Methods And Apparatus                                                                                       |
| 82930494     | Granted   | 200980161291.X   | 12/21/2009  | 41738      | 200980161291.X     | CN | CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC                                                                           |
| 82930500     | Granted   | 201080040116.8   | 1/6/2010    | 41794      | 201080040116.8     | CN | OPTICAL INTERCONNECT                                                                                                      |
| 82930537     | Granted   | 200980161441.7   | 9/23/2009   | 11/26/2014 | 200980161441.7     | CN | OPTICAL DEVICES BASED ON DIFFRACTION GRATINGS                                                                             |
| 82931281     | Granted   | ZL200980160839.9 | 8/9/2009    | 3/11/2015  | 200980160839.9     | CN | Illuminable Indicator Of Electronic Device Being Enabled<br>Based At Least On User Presence                               |
| 82931299     | Published |                  | 10/29/2009  |            | 200980162191.9     | CN | SWITCH THAT MONITORS FOR FINGERPRINTED PACKETS                                                                            |
| 82931327     | Published |                  | 10/29/2009  |            | 200980162179.8     | CN | NETWORK SWITCH CONNECTED TO A SENSOR                                                                                      |
| 82931336     | Granted   | ZL200980162264.4 | 10/31/2009  | 41990      | 200980162264.4     | CN | MALICIOUS CODE DETECTION                                                                                                  |
| 82931430     | Granted   | ZL201080062644.3 | 1/29/2010   | 42165      | 201080062644.3     | CN | VERTICAL-CAVITY SURFACE-EMITTING LASERS WITH NON-PERIODIC GRATINGS                                                        |
| 82931442     | Published |                  | 3/19/2010   |            | 201080065594.4     | CN | OPTICAL STAR COUPLER                                                                                                      |
| 82931448     | Published |                  | 3/31/2010   |            | 201080065887.2     | CN | WAVEGUIDE SYSTEM AND METHODS                                                                                              |
| 82933737     | Granted   | 200980162152.9   | 11/13/2009  | 41969      | 200980162152.9     | CN | PARALLELIZED CHECK POINTING USING Mats AND THROUGH SILICON Vias (tsvs)                                                    |
| 82933815     | Allowed   |                  | 10/28/2009  |            | 200980162192.3     | CN | METHOD AND APPARATUS FOR VIRUS THROTTLING WITH RATE LIMITING                                                              |
| 82934007     | Published |                  | 1/11/2010   |            | 201080061152.2     | CN | SYSTEM INCLUDING DRIVER CIRCUIT FOR ELECTRICAL SIGNALING AND OPTICAL SIGNALING                                            |
| 82934073     | Allowed   |                  | 1/31/2010   |            | 201080062814.8     | CN | METHOD FOR MITIGATING FALSE POWERED DEVICE DETECTION                                                                      |
| 82937579     | Published |                  | 3/24/2010   |            | 201080065682.4     | CN | Power Capping Feedback Normalization                                                                                      |
| 82938229     | Granted   | ZL201080066361.6 | 4/22/2010   | 42032      | 201080066361.6     | CN | System And Method For Balancing Input Current With Parallel Power Supplies                                                |
| 82938252     | Published |                  | 12/28/2009  |            | 200980163213.3     | CN | A SYSTEM FOR PROVIDING PHYSICALLY SEPARATED COMPUTE AND I/O RESOURCES IN THE DATACENTER TO ENABLE SPACE AND POWER SAVINGS |
| 82938277     | Published |                  | 3/22/2010   |            | 201080065656.1     | CN | MODULAR DATA CENTER                                                                                                       |
| 82938291     | Allowed   |                  | 12/2/2009   |            | 200980162693.1     | CN | SIGNAL SENSING DEVICES AND CIRCUIT BOARDS                                                                                 |
| 82939691     | Granted   | ZL200980162180.0 | 10/28/2009  | 41990      | 200980162180       | CN | Method And Apparatus For Tracing A Multicast Flow                                                                         |
| 83003344     | Published |                  | 11/9/2010   |            | 201080060959.4     | CN | Enabling Full-Text Searching Using A Structured Data Store                                                                |
| 83012343     | Published |                  | 4/14/2010   |            | 201080066155.5     | CN | Method For Keyword Extraction                                                                                             |
| 83013451     | Published |                  | 4/27/2010   |            | 201080066473.1     | CN | Method Of Extracting Named Entity                                                                                         |
| 83034258     | Published |                  | 5/19/2010   |            | 201080066847.X     | CN | SYSTEM AND METHOD FOR WEB PAGE SEGMENTATION USING ADAPTIVE THRESHOLD COMPUTATION                                          |
| 83086464     | Published |                  | 2/11/2010   |            | 201080063776.8     | CN | EXECUTABLE IDENTITY BASED FILE ACCESS                                                                                     |

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| 83092486     | Published |               | 6/18/2010   |            | 201080067505.X     | CN | Systems And Methods For Determining Electrical Connectivity                                           |
| 83093875     | Allowed   |               | 3/30/2010   |            | 201080065880       | CN | SYSTEM AND METHOD FOR OUTER JOINS ON A PARALLEL DATABASE MANAGEMENT SYSTEM                            |
| 83094375     | Published |               | 5/28/2010   |            | 201080067092.5     | CN | DISABLING A DISPLAY REFRESH PROCESS                                                                   |
| 83099505     | Published |               | 4/19/2010   |            | 201080066328.3     | CN | NANOSCALE SWITCHING DEVICES WITH PARTIALLY OXIDIZED ELECTRODES                                        |
| 83108493     | Published |               | 4/9/2010    |            | 201080066078.3     | CN | PROJECT CLUSTERING AND RELATIONSHIP VISUALIZATION                                                     |
| 83111662     | Allowed   |               | 6/22/2010   |            | 201080067099.7     | CN | STORING DATA IN ANY OF A PLURALITY OF BUFFERS IN A MEMORY CONTROLLER                                  |
| 83114195     | Published |               | 4/29/2010   |            | 201080066505.8     | CN | DOCUMENT REGISTRY SYSTEM                                                                              |
| 83118655     | Published |               | 5/26/2010   |            | 201080067034.2     | CN | GRAPH AUTHORIZATION                                                                                   |
| 83118726     | Published |               | 5/12/2010   |            | 201080066741.X     | CN | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE TO UPDATE VIRTUAL MACHINE TEMPLATES                    |
| 83127157     | Published |               | 6/22/2010   |            | 201080067615.6     | CN | A METHOD AND SYSTEM FOR DETERMINING A DEPLOYMENT OF APPLICATIONS                                      |
| 83131968     | Published |               | 5/20/2011   |            | 201180025924.1     | CN | SECURITY THREAT DETECTION ASSOCIATED WITH SECURITY EVENTS AND AN ACTOR CATEGORY MODEL                 |
| 83133018     | Allowed   |               | 6/1/2010    |            | 201080067163.1     | CN | MULTIPLEXED SERIAL MEDIA INDEPENDENT INTERFACE                                                        |
| 83135097     | Published |               | 9/28/2011   |            | 2011800477258.1    | CN | HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION                                                |
| 83135701     | Published |               | 5/19/2010   |            | 201080068126.2     | CN | OPTICAL INTERCONNECT FABRICS AND OPTICAL SWITCHES                                                     |
| 83136242     | Published |               | 6/7/2010    |            | 201080067288.4     | CN | MODULE AND PORT                                                                                       |
| 83138140     | Published |               | 6/9/2010    |            | 201080067329.X     | CN | DETERMINING SIMILARITY SCORES OF ANOMALIES                                                            |
| 83139802     | Published |               | 6/30/2010   |            | 201080067851.8     | CN | SYSTEM AND METHOD FOR COLLABORATIVE INFORMATION SERVICES                                              |
| 83140871     | Published |               | 6/30/2010   |            | 201080067812.8     | CN | SYSTEM AND METHOD FOR A SERIALIZED DATA SERVICE                                                       |
| 83159854     | Published |               | 9/15/2010   |            | 201080069127.9     | CN | COMPUTER SYSTEM WITH FABRIC MODULES                                                                   |
| 83160154     | Published |               | 7/30/2010   |            | 201080068348.4     | CN | METHOD AND SYSTEM OF CONTROLLING POWER CONSUMPTION OF AGGREGATED I/O PORTS                            |
| 83161099     | Published |               | 7/26/2010   |            | 201080068233.5     | CN | Mitigation Of Detected Patterns In A Network Device                                                   |
| 83163733     | Published |               | 9/14/2010   |            | 201080069101.4     | CN | COMPUTER SYSTEM FABRIC SWITCH                                                                         |
| 83166223     | Published |               | 7/22/2010   |            | 201080068198.7     | CN | SQL Enumerator                                                                                        |
| 83166372     | Published |               | 9/13/2010   |            | 201080069076.X     | CN | POWER RAIL REGULATOR SYSTEM                                                                           |
| 83184689     | Published |               | 7/30/2010   |            | 201080069329.3     | CN | INFORMATION TECHNOLOGY SERVICE MANAGEMENT                                                             |
| 83184695     | Published |               | 7/30/2010   |            | 201080069327.4     | CN | SYSTEMS AND METHODS FOR CREDENTIALING                                                                 |
| 83185156     | Published |               | 8/17/2010   |            | 201080069664.3     | CN | PROVIDING AUTOMATION CODE CONTAINING A REPRESENTATION OF ALTERNATIVE INTERPRETATIONS OF A USER ACTION |

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| 83133691     | Published   |                | 9/30/2010   |            | 2010800693.77.2    | CN | Virtual Machines                                                                                |
| 83196410     | Published   |                | 9/7/2010    |            | 201080070017.4     | CN | SYSTEM AND METHOD FOR AUTOMATED DEPLOYMENT OF MULTI-COMPONENT COMPUTER ENVIRONMENT              |
| 83200404     | Published   |                | 9/23/2010   |            | 201080069066.6     | CN | METHODS, APPARATUS AND SYSTEMS FOR MONITORING LOCATIONS OF DATA WITHIN A NETWORK SERVICE        |
| 83208802     | Published   |                | 9/10/2010   |            | 201080070096.9     | CN | SYSTEM AND METHOD FOR INTERPRETING AND GENERATING INTEGRATION FLOWS                             |
| 83209074     | Application |                | 10/19/2010  |            | 201080069685.5     | CN | METHODS AND SYSTEMS FOR GENERATION OF AUTHORIZED VIRTUAL APPLIANCES                             |
| 83210413     | Published   |                | 12/1/2010   |            | 201080069759.5     | CN | DISPLAYING SYSTEM PERFORMANCE INFORMATION                                                       |
| 83210554     | Published   |                | 10/29/2010  |            | 201080069909.2     | CN | Software Application Recognition                                                                |
| 83214681     | Published   |                | 10/11/2010  |            | 201080069548.1     | CN | SYSTEM AND METHOD FOR QUERYING A DATA STREAM                                                    |
| 83215469     | Published   |                | 9/16/2010   |            | 201080070196.1     | CN | NANOSCALE SWITCHING DEVICE                                                                      |
| 83219393     | Published   |                | 10/8/2010   |            | 201080070031.4     | CN | OPTICAL MULTIPLEXING USING LASER ARRAYS                                                         |
| 83222066     | Published   |                | 10/27/2010  |            | 201080069855.X     | CN | PATTERN DETECTION                                                                               |
| 83222073     | Published   |                | 11/1/2010   |            | 201080069908.8     | CN | MANAGING MAC MOVES WITH SECURE PORT GROUPS                                                      |
| 83224720     | Published   |                | 2/24/2011   |            | 201180052532.4     | CN | SYSTEM AND METHOD FOR ERROR REPORTING IN A NETWORK                                              |
| 83225186     | Granted     | 201080070325.7 | 10/8/2010   | 42074      | 201080070325.7     | CN | ELECTRONIC SYSTEM HAVING FANOUT OPTICAL BUSES                                                   |
| 83225193     | Published   |                | 10/8/2010   |            | 201080070359.6     | CN | OPTICAL POLARIZATION MULTIPLEXING USING LASER ARRAYS                                            |
| 83230336     | Published   |                | 10/28/2010  |            | 201080070998.2     | CN | ZONING DATA TO A VIRTUAL MACHINE                                                                |
| 83231544     | Granted     | CN 103270702 B | 10/27/2010  | 42249      | 201080070946.5     | CN | SYSTEMS, METHODS, AND APPARATUS FOR ENABLING AUDIO TRANSMISSION WITHIN A COMMUNICATIONS SESSION |
| 83255654     | Published   |                | 2/28/2011   |            | 201180055753.7     | CN | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                         |
| 83256522     | Published   |                | 1/31/2011   |            | 201180059615.6     | CN | Method and Circuit for Switching a Memristive Device in an Array                                |
| 83262516     | Published   |                | 12/3/2010   |            | 201080070493.6     | CN | SYSTEMS AND METHODS FOR PERFORMING A NESTED JOIN OPERATION                                      |
| 83262533     | Published   |                | 12/10/2010  |            | 201080070611.3     | CN | MANAGING RECORDS DISPLAYED IN A TREE LIST                                                       |
| 83262553     | Published   |                | 1/27/2011   |            | 201180062401.4     | CN | IMPORTANCE CLASS BASED DATA MANAGEMENT                                                          |
| 83262564     | Published   |                | 1/25/2011   |            | 201180060191.5     | CN | ANALYTICAL DATA PROCESSING                                                                      |
| 83263999     | Published   |                | 11/30/2010  |            | 201080071149.9     | CN | CHANGE MESSAGE BROADCAST ERROR DETECTION                                                        |
| 83265931     | Published   |                | 2/11/2011   |            | 201180067228.7     | CN | DETERMINING CHARACTERISTICS OF PARTICIPANTS IN A SOCIAL NETWORK                                 |
| 83265980     | Published   |                | 12/11/2010  |            | 201080070646.7     | CN | COMPUTER NETWORK NODE DISCOVERY                                                                 |
| 83410694     | Published   |                | 1/9/2011    |            | 201180064582.4     | CN | COMPUTER NETWORK NODE DISCOVERY SEQUENCING                                                      |
| 83416911     | Allowed     |                | 2/28/2011   |            | 201180068623.7     | CN | A SPRING LOADED LID                                                                             |

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| 83421536     | Published   |               | 1/20/2011   |            | 201180065035.8 CN  | CN | CHIP CARRIER SUPPORT SYSTEMS                                                                                                                        |
| 83421811     | Published   |               | 6/28/2011   |            | 201180070449.X CN  | CN | METHOD OF ASSOCIATING A CLIENT WITH AN ACCESS POINT IN A WIRELESS LOCAL AREA NETWORK                                                                |
| 83422018     | Allowed     |               | 1/20/2011   |            | 201180064918.7 CN  | CN | COMPOSITE PROCESSORS                                                                                                                                |
| 83422055     | Published   |               | 1/31/2011   |            | 201180065763.9 CN  | CN | CABLE HARNESS SWITCHES                                                                                                                              |
| 83422183     | Published   |               | 10/11/2011  |            | 201180069576.8 CN  | CN | Network Topology Discovery                                                                                                                          |
| 83498556     | Published   |               | 3/11/2011   |            | 201180068846.3 CN  | CN | Sampling Network Traffic                                                                                                                            |
| 83507393     | Published   |               | 3/1/2012    |            | 201280011984.2 CN  | CN | METHODS AND SYSTEMS FOR FULL PATTERN MATCHING IN HARDWARE                                                                                           |
| 83515788     | Published   |               | 2/1/2011    |            | 201180069275.5 CN  | CN | NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                                                                                             |
| 83543182     | Published   |               | 3/3/2011    |            | 201180068977.1 CN  | CN | TESTING INTEGRATED BUSINESS SYSTEMS                                                                                                                 |
| 83546339     | Published   |               | 2/10/2011   |            | 201180069227.6 CN  | CN | GRATING-BASED POLARIZERS AND OPTICAL ISOLATORS                                                                                                      |
| 83584525     | Published   |               | 3/15/2011   |            | 201180069285.9 CN  | CN | USABILITY TESTING                                                                                                                                   |
| 83588858     | Published   |               | 4/19/2011   |            | 201180069470.8 CN  | CN | Computing A Performance Characteristic Of A Network Device                                                                                          |
| 83593350     | Published   |               | 6/2/2011    |            | 201180069690 CN    | CN | NETWORK VIRTUALIZATION                                                                                                                              |
| 83618370     | Published   |               | 5/25/2011   |            | 201180071111.6 CN  | CN | BLADE COMPUTER SYSTEM                                                                                                                               |
| 83629027     | Published   |               | 6/27/2011   |            | 201180070383.4 CN  | CN | COOLING A SECONDARY COMPONENT BY DIVERTING AIRFLOW USING AN AIR CHANNEL ASSOCIATED WITH A THERMAL DISSIPATION DEVICE THAT COOLS A PRIMARY COMPONENT |
|              |             |               |             |            |                    |    | METHOD AND APPARATUS FOR MOVING A SOFTWARE OBJECT                                                                                                   |
| 83640283     | Published   |               | 4/7/2011    |            | 201180069795.6 CN  | CN | GRAPHICAL OBJECT CLASSIFICATION                                                                                                                     |
| 83663168     | Published   |               | 4/7/2011    |            | 201180069796 CN    | CN | DATA BACKUP PRIORITIZATION                                                                                                                          |
| 83681476     | Published   |               | 3/21/2011   |            | 201180070932.8 CN  | CN | DUAL-PLANE MEMORY ARRAY                                                                                                                             |
| 83691789     | Published   |               | 3/29/2011   |            | 201180070415 CN    | CN | SYSTEMS AND METHODS FOR MERGING PARTIALLY AGGREGATED QUERY RESULTS                                                                                  |
| 83696810     | Published   |               | 6/30/2011   |            | 201180071742.8 CN  | CN | Optical Interconnect                                                                                                                                |
| 83698837     | Application |               | 7/18/2011   |            | 201180070805.8 CN  | CN | NETWORK ASSET INFORMATION MANAGEMENT                                                                                                                |
| 83699836     | Published   |               | 10/31/2011  |            | 201180071254.7 CN  | CN | Transferring a Conference Session Between Conference Servers Due to Failure                                                                         |
| 83700257     | Application |               | 7/25/2011   |            | 201180070824 CN    | CN | AUTOMATIC CLASSIFICATION ADJUSTMENT OF RECORDED ACTIONS FOR AUTOMATION SCRIPT                                                                       |
| 83701556     | Published   |               | 5/3/2011    |            | 201180072070.2 CN  | CN | TRANSITION BETWEEN STATES IN A PROCESSOR                                                                                                            |
| 83701888     | Published   |               | 2/8/2012    |            | 201280035506.5 CN  | CN | Controlling Access To Communication Services                                                                                                        |
| 83703540     | Published   |               | 11/29/2013  |            | 201310629658.4 CN  | CN | IMPLEMENTATION OF NETWORK DEVICE COMPONENTS IN NETWORK DEVICES                                                                                      |
| 83713427     | Published   |               | 5/25/2011   |            | 201180071104.6 CN  | CN | APPLICATION SECURITY TESTING                                                                                                                        |
| 83714203     | Published   |               | 5/31/2011   |            | 201180071281.4 CN  | CN |                                                                                                                                                     |

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| 83719054     | Published |                  | 5/20/2011   |            | 201180071007.7     | CN | SYSTEM AND METHOD FOR CONFIGURATION POLICY EXTRACTION                                  |
| 83721272     | Published |                  | 6/7/2011    |            | 201180071448.7     | CN | A SCALABLE MULTI-TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS               |
| 83731363     | Published |                  | 6/14/2011   |            | 201180071613.9     | CN | DEDUPLICATION IN DISTRIBUTED FILE SYSTEMS                                              |
| 83733017     | Published |                  | 8/8/2011    |            | 201180071455.7     | CN | Fabric Chip Having Trunked Links                                                       |
| 83747172     | Published |                  | 7/20/2011   |            | 201180072227.1     | CN | POWER SUPPLY SYSTEM WITH DYNAMIC FILTERING                                             |
| 83766015     | Published |                  | 10/31/2011  |            | 201180074634.6     | CN | IMPLEMENTING AN ENERGY PROPORTIONAL NETWORK ARCHITECTURE FROM DESIRED NETWORK CRITERIA |
| 83769039     | Published |                  | 6/29/2011   |            | 201180071938.7     | CN | Application Migration with Dynamic Operating System Containers                         |
| 83769095     | Published |                  | 7/11/2011   |            | 201180072229       | CN | VIRTUAL MACHINE PLACEMENT                                                              |
| 83778608     | Published |                  | 6/24/2011   |            | 201180072722.2     | CN | HIGH-RELIABILITY HIGH-SPEED MEMRISTOR                                                  |
| 83778736     | Published |                  | 7/1/2011    |            | 201180073208       | CN | METHOD OF AND SYSTEM FOR MANAGING COMPUTING RESOURCES                                  |
| 83782540     | Published |                  | 11/4/2011   |            | 201180072863.4     | CN | Fault Processing in a System                                                           |
| 83782563     | Published |                  | 12/22/2011  |            | 201180072367.9     | CN | CRYPTOGRAPHIC INFORMATION ASSOCIATION TO MEMORY REGIONS                                |
| 83783388     | Published |                  | 7/27/2011   |            | 201180072603.7     | CN | MAINTAINING AND UTILIZING A REPORT KNOWLEDGBASE                                        |
| 83783989     | Published |                  | 7/12/2011   |            | 201180073393.3     | CN | AUDIO SAMPLE                                                                           |
| 83784160     | Published |                  | 1/31/2012   |            | 201280035799.7     | CN | Access to Memory Region Including Confidential Information                             |
| 83786516     | Published |                  | 7/22/2011   |            | 201180073145.9     | CN | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                |
| 83786680     | Granted   | ZI201430045350.0 | 3/10/2014   | 42137      | 201430045350       | CN | FRONT BEZEL FOR AN UNINTERRUPTIBLE POWER SYSTEMS (UPS) RACK AND TOWER                  |
| 83787656     | Published |                  | 8/1/2012    |            | 201280048361.2     | CN | ASSET MODEL IMPORT CONNECTOR                                                           |
| 83791151     | Published |                  | 7/29/2011   |            | 201180073163.7     | CN | OPTICAL POWER SPLITTERS                                                                |
| 83793378     | Published |                  | 10/25/2011  |            | 201180074418.1     | CN | DRIVE CARRIER LIGHT SOURCE CONTROL                                                     |
| 83793403     | Published |                  | 9/28/2011   |            | 201180073139.3     | CN | IMPLEMENTING A SWITCH FABRIC RESPONSIVE TO AN UNAVAILABLE PATH                         |
| 83806236     | Published |                  | 9/7/2012    |            | 201280043582       | CN | VISUAL COMPONENT AND DRILL DOWN MAPPING                                                |
| 83807335     | Published |                  | 8/3/2011    |            | 201180073607.7     | CN | NITRIDE-BASED MEMRISTORS                                                               |
| 83810404     | Published |                  | 8/17/2011   |            | 201180072892       | CN | TRACING DATA BLOCK OPERATIONS                                                          |
| 83815227     | Published |                  | 8/26/2011   |            | 201180073670       | CN | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                |
| 83817961     | Published |                  | 11/18/2011  |            | 201180074933.X     | CN | QUERY SUMMARY GENERATION USING ROW-COLUMN DATA STORAGE                                 |

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| 83821204     | Published |               | 8/31/2011   |            | 201180073826.5     | CN | MULTIMODE FIBER FOR MODULATABLE SOURCE                                                         |
| 83834197     | Published |               | 9/2/2011    |            | 201180074045.8     | CN | APPARATUS TO STORE DATA AND METHODS TO READ MEMORY CELLS                                       |
| 83835837     | Published |               | 9/15/2011   |            | 201180074568.2     | CN | VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                        |
| 83852047     | Published |               | 9/30/2011   |            | 201180073895.6     | CN | OPTICAL POWER SPLITTER INCLUDING A ZIG-ZAG                                                     |
| 83853741     | Published |               | 10/25/2011  |            | 201180074417.7     | CN | DRIVE CARRIER TOUCH SENSING                                                                    |
| 83854677     | Published |               | 10/28/2011  |            | 201180074480       | CN | Fan Impeller with Multiple Blades Shaped and Disposed to Provide High Air-Power Efficiency     |
| 83857906     | Published |               | 10/12/2011  |            | 201180074092.2     | CN | SELECT DEVICE FOR CROSS POINT MEMORY STRUCTURES                                                |
| 83862102     | Published |               | 10/28/2011  |            | 201180074448.2     | CN | METAL-INSULATOR PHASE TRANSITION FLIP-FLOP                                                     |
| 83862738     | Published |               | 10/7/2011   |            | 201180074041.X     | CN | MAPPING PERSISTENT STORAGE                                                                     |
| 83862993     | Published |               | 10/10/2011  |            | 201180075414.5     | CN | METHODS AND SYSTEMS FOR IDENTIFYING ACTION FOR RESPONDING TO ANOMALY IN CLOUD COMPUTING SYSTEM |
|              |           |               |             |            |                    |    |                                                                                                |
| 83863448     | Published |               | 1/6/2012    |            | 201280066035.4     | CN | WIRELESS ACCESS POINT ASSIGNMENT                                                               |
| 83881366     | Published |               | 10/13/2011  |            | 201280061583.8     | CN | PROVISIONING A TELEPHONY NETWORK IN RESPONSE TO AN ELECTRONIC DEVICE ATTACHING TO THE NETWORK  |
| 83883365     | Published |               | 10/28/2011  |            | 201180074487.2     | CN | DEVICES INCLUDING A DIAMOND LAYER                                                              |
| 83929402     | Published |               | 10/31/2011  |            | 201180074565.9     | CN | REMOTE SOFTWARE DEPLOYMENT ACROSS A NETWORK                                                    |
| 83930195     | Published |               | 12/9/2011   |            | 201180074989.5     | CN | Control of Light Wavefronts                                                                    |
| 83930292     | Published |               | 12/9/2011   |            | 201180075172.X     | CN | Optical Connections                                                                            |
| 83933039     | Allowed   |               | 12/23/2011  |            | 201180075198.4     | CN | MANAGING A FACILITY                                                                            |
| 83933598     | Published |               | 10/31/2011  |            | 201180076142       | CN | EMAIL TAGS                                                                                     |
| 83946416     | Published |               | 3/8/2012    |            | 201280068650.9     | CN | DATA SAMPLING DEDUPLICATION                                                                    |
| 83946482     | Published |               | 4/27/2012   |            | 201280068707.5     | CN | COLLABORATIVE CACHING                                                                          |
| 83948703     | Published |               | 1/9/2012    |            | 201280060633       | CN | Optical Connections                                                                            |
| 83948775     | Published |               | 1/10/2012   |            | 201280060852.9     | CN | OPTICAL CONNECTORS                                                                             |
| 83948823     | Published |               | 1/12/2012   |            | 201280061237.X     | CN | INTEGRATED SUB-WAVELENGTH GRATING SYSTEM                                                       |
| 83951525     | Published |               | 1/27/2012   |            | 201280064301.X     | CN | Glass-Silicon Wafer-Stacked Opto-Electronic Platforms                                          |
| 83952187     | Published |               | 4/30/2012   |            | 201280068621.2     | CN | PREVENTING A HYBRID MEMORY MODULE FROM BEING MAPPED                                            |
| 83952218     | Published |               | 5/1/2012    |            | 201280072856.9     | CN | PREARRANGING DATA TO COMMIT TO NON-VOLATILE MEMORY                                             |
| 83952372     | Published |               | 5/1/2012    |            | 201280072861.X     | CN | DETERMINING SEGMENT BOUNDARIES FOR DEDUPLICATION                                               |
| 83952424     | Published |               | 5/1/2012    |            | 201280072821.5     | CN | SEGMENT COMBINING FOR DEDUPLICATION                                                            |
| 83959804     | Published |               | 1/31/2012   |            | 201280064638       | CN | COMBINATION UNDERFILL-DAM AND ELECTRICAL-INTERCONNECT STRUCTURE FOR AN OPTO-ELECTRONIC ENGINE  |
| 83964306     | Published |               | 1/25/2012   |            | 201280068122.3     | CN | STORAGE SYSTEM DEVICE MANAGEMENT                                                               |

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| 83973122     | Published   |               | 4/24/2012   |            | 201280068668.6     | CN | Determining A Schedule For A Job To Replicate An Object<br>Stored On A Storage Appliance               |
| 83976188     | Published   |               | 1/31/2012   |            | 201280068623.1     | CN | CONNECTOR DETECTION                                                                                    |
| 83980642     | Published   |               | 3/8/2012    |            | 201280068643.9     | CN | DIAGNOSTIC MODULE                                                                                      |
| 83983502     | Published   |               | 4/11/2012   |            | 201280068718.3     | CN | OPTICAL PLENUM                                                                                         |
| 83985631     | Published   |               | 2/21/2012   |            | 201280068624.6     | CN | MAINTAINING SYSTEM FIRMWARE IMAGES REMOTELY<br>USING A DISTRIBUTE FILE SYSTEM PROTOCOL                 |
| 83987003     | Published   |               | 2/29/2012   |            | 201280068628.4     | CN | UNIDIRECTIONAL RING LASERS                                                                             |
| 83990810     | Published   |               | 4/20/2012   |            | 201280068642.4     | CN | Unified User Profiles                                                                                  |
| 83991305     | Published   |               | 3/2/2012    |            | 201280068632       | CN | VERSIONED MEMORIES USING A MULTI-LEVEL CELL                                                            |
| 83991325     | Published   |               | 1/26/2012   |            | 201280068228.3     | CN | IDENTIFYING A PUSH COMMUNICATION PATTERN                                                               |
| 83991365     | Published   |               | 1/30/2012   |            | 201280068483.8     | CN | REDUNDANT NON-LOOPING PATHS                                                                            |
| 83991394     | Published   |               | 4/25/2012   |            | 201280068731.9     | CN | INTER DOMAIN LINK FOR FIBRE CHANNEL                                                                    |
| 83991422     | Published   |               | 4/30/2012   |            | 201280068478.7     | CN | CONVERGED FABRIC FOR FCoE                                                                              |
| 83991436     | Published   |               | 4/30/2012   |            | 201280068654.7     | CN | NETWORK ACCESS APPARATUS HAVING A CONTROL MODULE<br>AND A NETWORK ACCESS MODULE                        |
| 83991560     | Published   |               | 4/27/2012   |            | 201280068638.8     | CN | LOCAL CHECKPOINTING USING A MULTI-LEVEL CELL                                                           |
| 83991599     | Published   |               | 1/26/2012   |            | 201280068227.9     | CN | IMAGE-BASED APPLICATION AUTOMATION                                                                     |
| 83991752     | Published   |               | 1/31/2012   |            | 201280068701.8     | CN | IDENTIFICATION OF A FAILED CODE CHANGE                                                                 |
| 83992312     | Published   |               | 3/16/2012   |            | 201280068485.7     | CN | VARIED MULTILAYER MEMRISTIVE DEVICE                                                                    |
| 83992336     | Published   |               | 4/11/2012   |            | 201280068609.1     | CN | ROUTING OPTICAL SIGNALS                                                                                |
| 83992421     | Published   |               | 4/25/2012   |            | 201280068627.X     | CN | ANALYZING LIGHT BY MODE INTERFERENCE                                                                   |
| 83992441     | Published   |               | 4/26/2012   |            | 201280068357.2     | CN | OPTICAL SLAB                                                                                           |
| 83992710     | Application |               | 1/30/2013   |            | 201380071856.1     | CN | ACQUIRING IDENTIFICATION OF AN APPLICATION LIFECYCLE<br>MANAGEMENT ENTITY ASSOCIATED WITH SIMILAR CODE |
| 83992731     | Application |               | 1/31/2013   |            | 201380072052.3     | CN | DEFINING A DESIGN PLAN                                                                                 |
| 83992751     | Published   |               | 3/29/2012   |            | 201280068631.6     | CN | A Conceptual Services Implementation Platform                                                          |
| 83992767     | Published   |               | 4/25/2012   |            | 201280068614.2     | CN | FILE TRANSFER USING XML                                                                                |
| 83992819     | Published   |               | 12/3/2012   |            | 201280077474.5     | CN | GENERIC RESOURCE PROVIDER FOR CLOUD SERVICE                                                            |
| 83992837     | Published   |               | 4/23/2012   |            | 201280068358.7     | CN | INFLUENCE SCORES FOR SOCIAL MEDIA PROFILES                                                             |
| 83995333     | Published   |               | 4/30/2012   |            | 201280068694.1     | CN | BLOCK LEVEL STORAGE                                                                                    |
| 83995381     | Application |               | 2/28/2013   |            | 201380071719.8     | CN | AN INTERFACE FOR CREATING A PLAN ARTIFACT                                                              |
| 83995570     | Published   |               | 2/7/2012    |            | 201280068697.5     | CN | TESTING A MOBILE APPLICATION                                                                           |
| 83995604     | Published   |               | 4/26/2012   |            | 201280068675.9     | CN | PLATFORM RUNTIME ABSTRACTION                                                                           |
| 83995621     | Published   |               | 4/27/2012   |            | 201280068665.5     | CN | MAPPING APPLICATION DEPENDENCIES AT RUNTIME                                                            |
| 83995638     | Published   |               | 1/31/2012   |            | 201280068674.4     | CN | MEMORY MODULE BUFFER DATA STORAGE                                                                      |
| 83995667     | Published   |               | 4/30/2012   |            | 201280068787.4     | CN | Prioritization of continuous deployment pipeline tests                                                 |
| 83995684     | Published   |               | 1/31/2012   |            | 201280068487.6     | CN | REDUCING CURRENT HARMONICS AT LIGHT LOADS                                                              |
| 83995728     | Published   |               | 3/12/2012   |            | 201280068640.5     | CN | LIQUID TEMPERATURE CONTROL COOLING                                                                     |

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| 83995793     | Published   |                  | 3/12/2012   |            | 201280068612.3     | CN | RACK COOLING SYSTEM WITH A COOLING SECTION                                         |
| 83995816     | Published   |                  | 4/20/2012   |            | 201280068099.8     | CN | VOLTAGE REGULATOR CONTROL SYSTEM                                                   |
| 83996406     | Published   |                  | 12/15/2014  |            | 201410776007.2     | CN | FILTERING DATA FROM A DATABASE                                                     |
| 83996448     | Published   |                  | 4/30/2012   |            | 201280068784       | CN | CONTROL SIGNAL BASED ON A COMMAND TAPPED BY A USER                                 |
| 83998470     | Published   |                  | 2/29/2012   |            | 201280070943       | CN | NETWORK SERVICE INTERFACE ANALYSIS                                                 |
| 84000267     | Published   |                  | 2/29/2012   |            | 201280070933.7     | CN | NETWORK SERVICE INTERFACE ANALYSIS                                                 |
| 84017513     | Published   |                  | 2/29/2012   |            | 201280070916.3     | CN | CONTROL OF FREQUENCY CHANNEL BETWEEN WIRELESS ACCESS POINTS ACCORDING TO SEQUENCE  |
| 84017580     | Published   |                  | 4/27/2012   |            | 201280072693.4     | CN | HOME NETWORK PACKET DELIVERY                                                       |
| 84019766     | Published   |                  | 4/27/2012   |            | 201280072683       | CN | DATA CENTER SERVICE ORIENTED NETWORKING                                            |
| 84020528     | Application |                  | 4/30/2012   |            | 201280072086.8     | CN | HYBRID MOS OPTICAL MODULATOR                                                       |
| 84022139     | Published   |                  | 2/22/2012   |            | 201280071766.8     | CN | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM ON A COMPUTER                   |
| 84026916     | Published   |                  | 4/25/2012   |            | 201280071871.1     | CN | OPEN-GAIN TRANS-IMPEDANCE AMPLIFIER WITH PROGRAMMABLE INPUT IMPEDANCE              |
| 84027718     | Published   |                  | 2/23/2012   |            | 201280072039.3     | CN | Firmware Package to Modify Active Firmware                                         |
| 84037070     | Published   |                  | 3/8/2012    |            | 201280073034.2     | CN | MODIFYING VIRTUAL MACHINE COMMUNICATIONS                                           |
| 84041406     | Published   |                  | 3/26/2012   |            | 201280072423.3     | CN | TOPOLOGICAL QUERY IN MULTI-TENANCY ENVIRONMENT                                     |
| 84044286     | Allowed     |                  | 1/30/2015   |            | 201530028977.X     | CN | HOT PLUG BUTTON WITH AN IDENTIFYING COLORED STRIPE                                 |
| 84044298     | Granted     | ZL201530028758.1 | 1/30/2015   | 42214      | 201530028758.1     | CN | Eagle low-cost Small Form Factor Hard Drive Carrier – Design                       |
| 84044334     | Application |                  | 12/17/2014  |            | 201430532742.X     | CN | SLED FOR A CARRIER                                                                 |
| 84046822     | Published   |                  | 3/30/2012   |            | 201280072134.3     | CN | SOFTWARE DEVELOPMENT ACTIVITY                                                      |
| 84049808     | Published   |                  | 3/14/2012   |            | 201280073184.3     | CN | REPLACEABLE MODULAR OPTICAL CONNECTION ASSEMBLY                                    |
| 84049825     | Published   |                  | 3/14/2012   |            | 201280073000.3     | CN | Allocating Bandwidth in a Network                                                  |
| 84050561     | Published   |                  | 3/30/2012   |            | 201280072159.3     | CN | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE FOR A VIOLATION OF THE PERIMETER |
| 84060942     | Published   |                  | 4/30/2012   |            | 201280072798.X     | CN | ADDRESS TRANSLATION GASKET                                                         |
| 84061753     | Published   |                  | 4/30/2012   |            | 201280072799.4     | CN | PROCESSOR PROVIDING MULTIPLE SYSTEM IMAGES                                         |
| 84063605     | Published   |                  | 4/30/2012   |            | 201280072800.3     | CN | CONFIGURABLE COMPUTER MEMORY                                                       |
| 84071849     | Published   |                  | 4/20/2012   |            | 201280072501.X     | CN | TESTING SYSTEM FOR AN INTEGRATED SOFTWARE SYSTEM                                   |
| 84071974     | Published   |                  | 6/8/2012    |            | 201280072863.9     | CN | VERSION MANAGEMENT FOR APPLICATIONS                                                |
| 84071997     | Published   |                  | 6/8/2012    |            | 201280072820       | CN | CLOUD APPLICATION DEPLOYMENT PORTABILITY                                           |
| 84072035     | Published   |                  | 6/28/2012   |            | 201280072822.X     | CN | MEMORY MODULE WITH A DUAL-PORT BUFFER                                              |
| 84072851     | Published   |                  | 6/8/2012    |            | 201280072843.1     | CN | TEST AND MANAGEMENT FOR CLOUD APPLICATIONS                                         |
| 84072873     | Published   |                  | 7/31/2012   |            | 201280072854.X     | CN | Orchestrating Hybrid Cloud Services                                                |
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| 84072990     | Published   |               | 7/31/2012   |            | 201280072825.3     | CN | Supporting Multi-Tenancy in a Federated Data Management System                                                         |
| 84074281     | Published   |               | 5/30/2012   |            | 201280072885.5     | CN | SERVER PROFILE TEMPLATES                                                                                               |
| 84075999     | Published   |               | 5/29/2012   |            | 201280073227.8     | CN | DEVICES INCLUDING INDEPENDENTLY CONTROLLABLE ABSORPTION REGION AND MULTIPLICATION REGION                               |
|              |             |               |             |            |                    |    | ELECTRIC FIELDS                                                                                                        |
| 84076048     | Published   |               | 6/28/2012   |            | 201280072890.6     | CN | Optical Shuffling                                                                                                      |
| 84076096     | Published   |               | 7/25/2012   |            | 201280072708.7     | CN | Avalanche Photodiodes with Defect-assisted Silicon Absorption Regions                                                  |
| 84076168     | Published   |               | 7/26/2012   |            | 201280074278.2     | CN | OPTICAL ENGINE                                                                                                         |
| 84076297     | Published   |               | 7/27/2012   |            | 201280072878.5     | CN | OPTICALLY CONNECTING A CHIP PACKAGE TO AN OPTICAL CONNECTOR                                                            |
| 84076322     | Published   |               | 7/20/2012   |            | 201280072905.9     | CN | MIGRATING APPLICATIONS BETWEEN NETWORKS                                                                                |
| 84076451     | Published   |               | 7/30/2012   |            | 201280072807.5     | CN | Detecting Defects in a Processor Socket                                                                                |
| 84077559     | Published   |               | 7/30/2012   |            | 201280072849.8     | CN | PROVIDING AGREEMENT INFORMATION TO ALLOW ACCESS BY A CLIENT DEVICE OF SELECTED EQUIPMENT FROM AMONG MULTIPLE EQUIPMENT |
| 84077657     | Published   |               | 5/31/2012   |            | 201280072858.8     | CN | LOCAL ERROR DETECTION AND GLOBAL ERROR CORRECTION                                                                      |
| 84079480     | Published   |               | 5/30/2012   |            | 201280072651       | CN | FIELD SELECTION FOR PATTERN DISCOVERY                                                                                  |
| 84079505     | Published   |               | 7/25/2012   |            | 201280072906.3     | CN | DETERMINING APPLICATION VULNERABILITIES                                                                                |
| 84079548     | Published   |               | 5/31/2012   |            | 201280072795.6     | CN | ESTABLISHING TRUST BETWEEN PROCESSOR AND SERVER                                                                        |
| 84079672     | Published   |               | 7/30/2012   |            | 201280072842.7     | CN | GENERATING AND PARTITIONING POLYNOMIALS                                                                                |
| 84080803     | Published   |               | 4/30/2012   |            | 201280072801.8     | CN | Determining Virtual Machine Placement                                                                                  |
| 84084209     | Published   |               | 4/30/2012   |            | 201280072788.6     | CN | Globally managed rate-limit assignment for multi-tenant segregation using distributed rate limiters                    |
| 84088594     | Published   |               | 4/23/2012   |            | 201280074179.4     | CN | STATISTICAL ANALYSIS USING A GRAPHICS PROCESSING UNIT                                                                  |
| 84094648     | Published   |               | 12/31/2014  |            | 201280074442.X     | CN | CONFIGURABLE CLOS NETWORK                                                                                              |
| 84096654     | Application |               | 1/30/2015   |            | 201530028898.9     | CN | ENCLOSURE                                                                                                              |
| 84096772     | Application |               | 12/17/2014  |            | 201430532464.8     | CN | CARRIER                                                                                                                |
| 84103272     | Published   |               | 7/31/2012   |            | 201280074945.7     | CN | VIRTUAL MACHINE DATA PACKET ENCAPSULATION AND DECAPSULATION                                                            |
| 84105883     | Published   |               | 5/22/2012   |            | 201280073369.4     | CN | ALTERNATING POWER SOURCES TO MANAGE INPUT POWER IN A CONVERTER                                                         |
| 84106316     | Published   |               | 6/29/2012   |            | 201280073887.6     | CN | RE-VERIFICATION OF A DEVICE                                                                                            |
| 84110958     | Published   |               | 7/27/2012   |            | 201280074279.7     | CN | DYNAMIC SENSE CIRCUITRY                                                                                                |
| 84110992     | Published   |               | 7/27/2012   |            | 201280074223.1     | CN | STORING MEMORY WITH NEGATIVE DIFFERENTIAL RESISTANCE MATERIAL                                                          |

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| 84113017     | Published |               | 7/30/2012   |            | 201280074218       | CN | COMPACT PHOTONIC PLATFORMS                                                   |
| 84116615     | Published |               | 6/4/2012    |            | 201280075125.X     | CN | USER-DEFINED LOADING OF DATA ONTO A DATABASE                                 |
| 84116990     | Published |               | 6/22/2012   |            | 201280075374.9     | CN | OPTIMAL ASSIGNMENT OF VIRTUAL MACHINES AND VIRTUAL DISKS USING MULTIARY TREE |
| 84117055     | Published |               | 6/29/2012   |            | 201280074366.2     | CN | Optimizing Placement of Virtual Machines                                     |
| 84118232     | Published |               | 6/28/2012   |            | 201280074302.2     | CN | Multi-Level Cell Memory                                                      |
| 84118360     | Published |               | 9/27/2012   |            | 201280074860.9     | CN | REPLACING VIRTUAL FILE SYSTEM DATA STRUCTURES DELETED BY A FORCED UNMOUNT    |
| 84119008     | Published |               | 8/13/2012   |            | 201280075002.6     | CN | TRANS-IMPEDANCE AMPLIFIERS (TIA) THERMALLY ISOLATED FROM OPTICAL MODULES     |
| 84121730     | Published |               | 7/31/2012   |            | 201280075056.2     | CN | MONITORING FOR MANAGED SERVICES                                              |
| 84124741     | Published |               | 1/30/2013   |            | 201380062446       | CN | FAILOVER IN RESPONSE TO FAILURE OF A PORT                                    |
| 84125963     | Published |               | 7/27/2012   |            | 201280074928.3     | CN | RECORDING EXTERNAL PROCESSES                                                 |
| 84126484     | Published |               | 7/17/2012   |            | 201280074749.X     | CN | SYSTEM AND METHOD FOR OPERATING SYSTEM AGNOSTIC HARDWARE VALIDATION          |
| 84136967     | Published |               | 7/31/2012   |            | 201280075018.7     | CN | NETWORK TRAFFIC PROCESSING SYSTEM                                            |
| 84137261     | Published |               | 10/8/2012   |            | 201280075050.5     | CN | HYBRID CLOUD ENVIRONMENT                                                     |
| 84138263     | Published |               | 7/30/2012   |            | 201280076139.3     | CN | COMPLIATION SYSTEM FOR EXECUTABLE OBJECTS                                    |
| 84138401     | Published |               | 9/27/2012   |            | 201280075001.1     | CN | ALLOCATING WORKLOADS BASED ON AIR FLOW PRIORITY                              |
| 84139162     | Published |               | 7/31/2012   |            | 201280075051.X     | CN | CONJOINT VULNERABILITY IDENTIFIERS                                           |
| 84139557     | Published |               | 9/28/2012   |            | 201280075000.7     | CN | PLENUMS FOR REMOVABLE MODULES                                                |
| 84139981     | Published |               | 7/31/2012   |            | 201280075062.8     | CN | INSTRUMENTED FILE DEPLOYMENT                                                 |
| 84140050     | Published |               | 10/31/2012  |            | 201280075007.9     | CN | SIGNALING EXISTENCE OF A NETWORK NODE THAT IS IN A REDUCED-POWER MODE        |
| 84140141     | Published |               | 10/30/2012  |            | 201280075022.3     | CN | SMART MEMORY BUFFERS                                                         |
| 84140181     | Published |               | 10/26/2012  |            | 201280075016.8     | CN | PROCESSING STREAMING DATA WITH OPEN EXECUTORS                                |
| 84142523     | Published |               | 7/12/2012   |            | 201280075261.9     | CN | PROVIDING DATA TO BE RETRIEVED                                               |
| 84148296     | Published |               | 8/24/2012   |            | 201280075005.X     | CN | DEDICATING RESOURCES OF A NETWORK PROCESSOR                                  |
| 84149040     | Published |               | 7/31/2012   |            | 201280075078.9     | CN | POWER EFFICIENT NETWORK WITH NETWORK CONTROLLER                              |
| 84155389     | Published |               | 8/30/2012   |            | 201280075520.8     | CN | GLOBAL FEATURE LIBRARY USEABLE WITH CONTINUOUS DELIVERY                      |
| 84156866     | Published |               | 9/25/2012   |            | 201280076007       | CN | DISPLAYING INBOX ENTITIES AS A GRID OF FACETED TILES                         |
| 84158896     | Published |               | 9/13/2012   |            | 201280075693.X     | CN | CONTROLLING TEMPERATURES IN OPTICAL CIRCUITS                                 |
| 84161930     | Published |               | 9/21/2012   |            | 201280075923.2     | CN | MONITOR USABLE WITH CONTINUOUS DEPLOYMENT                                    |
| 84162966     | Published |               | 8/30/2012   |            | 201280076412.2     | CN | ENCRYPTED DATA STORE FOR RECORDS                                             |

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| 84164182     | Published   |               | 9/12/2012   |            | 201280076411.8     | CN | METADATA TREE WITH KEY ROTATION INFORMATION                                                     |
| 84164225     | Published   |               | 3/18/2013   |            | 201380049704.1     | CN | VISUALIZING CONDITIONS OF INFORMATION TECHNOLOGY ENVIRONMENTS                                   |
| 84164249     | Published   |               | 9/19/2012   |            | 201280076410.3     | CN | METADATA TREE OF A PATIENT WITH LOCKBOXES                                                       |
| 84168265     | Published   |               | 8/21/2012   |            | 201280076541.1     | CN | CONGESTION NOTIFICATION IN A NETWORK                                                            |
| 84174496     | Published   |               | 10/22/2012  |            | 201280076140.6     | CN | REFRESHING A GROUP OF MEMORY CELLS IN RESPONSE TO PRESENCE OF POTENTIAL DISTURBANCE             |
| 84179605     | Published   |               | 8/31/2012   |            | 201280076174.5     | CN | SELECTING A RESOURCE TO BE USED IN A DATA BACKUP OR RESTORE OPERATION                           |
| 84191542     | To Be Filed |               |             |            |                    | CN | RDX MicroServer Module                                                                          |
| 84191736     | Application |               | 9/25/2012   |            | 201280076003.2     | CN | NOTIFICATION OF ADDRESS RANGE INCLUDING NON-CORRECTABLE ERROR                                   |
| 84191757     | Application |               | 41495       |            | 201380050678.4     | CN | QR CODE UTILIZATION IN SELF-REGISTRATION IN A NETWORK                                           |
| 84192570     | Application |               | 9/28/2012   |            | 201280076099.2     | CN | COOLING ASSEMBLY                                                                                |
| 84192653     | Application |               | 10/8/2012   |            | 201280076291.1     | CN | ROBUST HARDWARE FAULT MANAGEMENT SYSTEM, METHOD AND FRAMEWORK FOR ENTERPRISE DEVICES            |
| 84193709     | Published   |               | 1/14/2013   |            | 201380055776.7     | CN | NONVOLATILE MEMORY ARRAY LOGIC                                                                  |
| 84201008     | Published   |               | 9/28/2012   |            | 201280077359.8     | CN | System and Method for Dynamically Selecting Between Memory Error Detection and Error Correction |
| 84202571     | Published   |               | 11/12/2012  |            | 201280077014.2     | CN | ASSIMILATING BUSINESS RULES                                                                     |
| 84202583     | Published   |               | 11/28/2012  |            | 201280077356.4     | CN | REGULATING APPLICATION TASK DEVELOPMENT                                                         |
| 84202600     | Published   |               | 11/30/2012  |            | 201280077396.9     | CN | RUNNING AGENTS TO EXECUTE AUTOMATION TASKS IN CLOUD SYSTEMS                                     |
| 84210909     | Published   |               | 1/27/2013   |            | 201380058709       | CN | SOCKET STATE TRANSFER                                                                           |
| 84210926     | Published   |               | 1/30/2013   |            | 201380061044.9     | CN | RUNTIME BACKUP OF DATA IN A MEMORY MODULE                                                       |
| 84217934     | Published   |               | 10/31/2012  |            | 201280076766.7     | CN | EXECUTING A QUERY HAVING MULTIPLE SET OPERATORS                                                 |
| 84223928     | Application |               | 4/2/2013    |            | 201380072004.4     | CN | SATA INITIATOR ADDRESSING AND STORAGE DEVICE SLICING                                            |
| 84224847     | Application |               | 3/29/2013   |            | 201380071699.4     | CN | PERFORMANCE RULES AND STORAGE UNITS                                                             |
| 84224869     | Application |               | 3/28/2013   |            | 201380071552.5     | CN | COORDINATING REPLICATION OF DATA STORED IN A NON-VOLATILE MEMORY-BASED SYSTEM                   |
| 84226530     | Published   |               | 2/15/2008   |            | 201510186573.2     | CN | Changing Power States Of Data-handling Devices To Meet Redundancy Criterion                     |
| 84232793     | Published   |               | 10/26/2012  |            | 201280078015.9     | CN | Summarization of a document                                                                     |
| 84237822     | Published   |               | 12/11/2012  |            | 201280077618.7     | CN | Data Operation in Shift Register Ring                                                           |



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| 84237925     | Published   |               | 10/31/2012  |            | 201280078095.8     | CN | CASE MANAGEMENT USING ACTIVE ENTITIES IN A SOCIAL NETWORK                                             |
| 84241552     | Published   |               | 12/7/2012   |            | 201280077566.3     | CN | NETWORK RESOURCE MANAGEMENT                                                                           |
| 84247400     | Published   |               | 11/30/2012  |            | 201280077395.4     | CN | MEMORY CONTROLLERS TO FORM SYMBOLS BASED ON BURSTS                                                    |
| 84252624     | Application |               | 12/3/2012   |            | 201280078180.4     | CN | CLOUD OBJECT                                                                                          |
| 84252636     | Published   |               | 12/3/2012   |            | 201280077480       | CN | CLOUD SERVICE MANAGEMENT SYSTEM                                                                       |
| 84262623     | Application |               | 1/30/2013   |            | 201380071523.9     | CN | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM        |
| 84273863     | Application |               | 7/9/2015    |            | 201380069957.5     | CN | RESTORATION OF A FILE SYSTEM OBJECT FROM RAW IMAGE BACKUP DATA                                        |
| 84291293     | Application |               | 1/15/2013   |            | 201380070560.8     | CN | Dynamic Firmware Updating                                                                             |
| 84292913     | Application |               | 1/31/2013   |            | 201380070368.9     | CN | LIQUID COOLING                                                                                        |
| 84292942     | Application |               | 1/31/2013   |            | 201380072022.2     | CN | RAM REFRESH RATE                                                                                      |
| 84292958     | Application |               | 1/31/2013   |            | 201380072019       | CN | UPDATING A COMMIT LIST TO INDICATE DATA TO BE WRITTEN TO A FIRMWARE INTERFACE VARIABLE REPOSITORY     |
| 84301949     | Application |               | 3/28/2013   |            | 201380071890.9     | CN | APPARATUS AND METHOD FOR STORAGE DEVICE READING                                                       |
| 84301999     | Application |               | 3/31/2013   |            | 201380072024.1     | CN | SCHEDULE FOR ACCESS TO SHARED WIRELESS MEDIUM BASED ON PROFILE DATA                                   |
| 84304262     | Application |               | 5/28/2013   |            | 201380071981.2     | CN | MOBILE AUGMENTED REALITY FOR MANAGING ENCLOSED AREAS                                                  |
| 84304303     | Application |               | 2/27/2013   |            | 201380072038.3     | CN | Generating a social circle for a user                                                                 |
| 84304329     | Application |               | 3/15/2013   |            | 201380072025.6     | CN | MAP MATCHING                                                                                          |
| 84304380     | Application |               | 9/15/2015   |            |                    | CN | Vertically-Tiered Client-Server Architecture                                                          |
| 84304406     | Application |               | 7/23/2015   |            |                    | CN | SHARED RESOURCE CONTENTION                                                                            |
| 84304449     | Application |               | 7/31/2015   |            |                    | CN | NON-VOLATILE MULTI-LEVEL-CELL MEMORY WITH DECOUPLED BITS FOR HIGHER PERFORMANCE AND ENERGY EFFICIENCY |
| 84306360     | Application |               | 1/25/2013   |            | 201380071354.9     | CN | BARCODE DEVICE                                                                                        |
| 84306464     | Application |               | 3/15/2013   |            | 201380071558.2     | CN | ENERGY BASED NETWORK RESTRUCTURING                                                                    |
| 84310694     | Application |               | 1/31/2013   |            | 201380072088.1     | CN | PREDICTIVE CACHE APPARATUS AND METHOD OF CACHE PREDICTION                                             |
| 84312512     | Application |               | 7/31/2015   |            | 201380072013.3     | CN | METHODS AND APPARATUS FOR DEBUGGING OF REMOTE SYSTEMS                                                 |
| 84312561     | Application |               | 7/28/2015   |            | 201380071586.4     | CN | REDUCING POWER FOR STORAGE DEVICES                                                                    |
| 84312581     | Application |               | 2/25/2013   |            | 201380071980.8     | CN | PRESENTATION OF USER INTERFACE ELEMENTS BASED ON RULES                                                |

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| 84312938     | Application  |               | 8/31/2015   |            |                    | CN | PROVIDING CODE CHANGE JOB SETS OF DIFFERENT SIZES FOR VALIDATORS                     |
| 90000079     | Application  |               | 1/31/2013   |            | 201380071173.4     | CN | GENERATING SOFTWARE TEST SCRIPT FROM VIDEO                                           |
| 90000088     | Application  |               | 1/31/2013   |            | 201380071884.3     | CN | PHYSICAL RESOURCE ALLOCATION                                                         |
| 90000096     | Application  |               | 2/1/2013    |            | 201380071852.3     | CN | TEST SCRIPT CREATION BASED ON ABSTRACT TEST USER CONTROLS                            |
| 90016074     | Application  |               | 1/30/2013   |            | 201380071868.4     | CN | UNIFIED CONTROL OF AN ELECTRONIC CONTROL SYSTEM AND A FACILITY CONTROL SYSTEM        |
| 90016427     | Application  |               | 1/23/2013   |            |                    | CN | Balancing Access Point Workloads                                                     |
| 90016633     | Application  |               | 1/31/2013   |            | 201380071979.5     | CN | SYNTHETIC HEALTHCARE DATA GENERATION                                                 |
| 90016681     | Application  |               | 1/31/2013   |            | 201380072047.2     | CN | Linking Media Access Between Devices                                                 |
| 90017104     | Acknowledged |               | 1/30/2013   |            |                    | CN | CONTROLLING A TOPOLOGY OF A NETWORK                                                  |
| 90017128     | Acknowledged |               | 1/31/2013   |            |                    | CN | NETWORK SWITCH STIMULATION                                                           |
| 90017136     | Acknowledged |               | 1/31/2013   |            |                    | CN | INDEXED SHAPED GRAPH CREATION                                                        |
| 90022815     | Application  |               | 8/30/2015   |            |                    | CN | DETERMINING TRANSFERABILITY OF A COMPUTING RESOURCE TO A CLOUD COMPUTING ENVIRONMENT |
| 90022875     | Acknowledged |               | 2/28/2013   |            |                    | CN | RESOURCE REFERENCE CLASSIFICATION                                                    |
| 90024181     | Application  |               | 2/28/2013   |            | 201380074008.6     | CN | RECOVERY PROGRAM USING DIAGNOSTIC RESULTS                                            |
| 90024605     | Application  |               | 3/25/2013   |            |                    | CN | MEMORY DEVICE HAVING ERROR CORRECTION LOGIC                                          |
| 90024622     | Application  |               | 3/28/2013   |            |                    | CN | REGULATING MEMORY ACTIVATION RATES                                                   |
| 90028930     | Acknowledged |               | 4/3/2013    |            |                    | CN | Cartridge Interdependence Switch                                                     |
| 90031113     | Acknowledged |               | 4/11/2013   |            |                    | CN | AUTOMATED CONTEXTUAL-BASED SOFTWARE LOCALIZATION                                     |
| 90031125     | Acknowledged |               | 4/30/2013   |            |                    | CN | DEPENDENCIES BETWEEN FEATURE FLAGS                                                   |
| 90031137     | Application  |               | 4/30/2013   |            |                    | CN | Coordinating Application Deployment with a Platform Tier                             |
| 90037365     | Application  |               | 3/12/2013   |            | 201380074555.4     | CN | PROGRAMMABLE ADDRESS MAPPING AND MEMORY ACCESS OPERATIONS                            |
|              |              |               |             |            |                    |    |                                                                                      |
| 90046356     | Application  |               | 3/14/2013   |            |                    | CN | SUPPORT MEMBER                                                                       |
| 90048523     | Acknowledged |               | 4/30/2013   |            |                    | CN | Memory Access Rate                                                                   |
| 90049322     | Application  |               | 3/26/2013   |            |                    | CN | TOP LOADING CARTRIDGE                                                                |
| 90049348     | Application  |               | 3/26/2013   |            |                    | CN | TOP LOADING CARTRIDGE                                                                |
| 90051543     | Application  |               | 3/29/2013   |            |                    | CN | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING NODE                                    |
| 90052820     | Acknowledged |               | 3/15/2013   |            |                    | CN | CO-PROCESSOR-BASED ARRAY-ORIENTED DATABASE PROCESSING                                |
|              |              |               |             |            |                    |    |                                                                                      |
| 90053553     | Application  |               | 3/28/2013   |            |                    | CN | STORING DATA FROM CACHE LINES TO MAIN MEMORY BASED ON MEMORY ADDRESSES               |
| 90053566     | Application  |               | 3/29/2013   |            |                    | CN | ELECTRONIC APPARATUS HAVING A COOLING APPARATUS                                      |

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| 90053627     | Acknowledged |                  | 4/3/2013    |            |                    | CN | ZONEABLE POWER REGULATION                                 |
| 90055193     | Acknowledged |                  | 3/13/2013   |            |                    | CN | MEMRISTORS WITH DOPANT-COMPENSATED SWITCHING              |
| 90056862     | Acknowledged |                  | 3/15/2013   |            |                    | CN | MULTIBAND OPERATION OF A SINGLE WI-FI RADIO               |
| 90056896     | Application  |                  | 4/3/2013    |            |                    | CN | Managing Firmware Updates                                 |
| 90065892     | Acknowledged |                  | 3/28/2013   |            |                    | CN | SHIELD FOR AN ELECTRONIC DEVICE                           |
| 90068037     | Acknowledged |                  | 3/28/2013   |            |                    | CN | Generating a Feature Set                                  |
| 90068065     | Acknowledged |                  | 3/29/2013   |            |                    | CN | QUERY FEATURES AND QUESTIONS                              |
| 90068090     | Acknowledged |                  | 3/29/2013   |            |                    | CN | BATCHING TUPLES                                           |
| 90068543     | To Be Filed  |                  |             |            |                    | CN | Scalable Joint Recommendation of User Interest and        |
| 90068697     | Acknowledged |                  | 4/16/2013   |            |                    | CN | Friendship for Big Social Media with MapReduce            |
| 82274972     | Granted      | 200910163581.X   | 8/28/2009   | 7/22/2015  | 200910163581.X     | CN | DISTRIBUTED EVENT CORRELATION SYSTEM                      |
| 84291352     | Application  |                  | 1/30/2013   |            | 201380071865       | CN | Method for Implementing Network Resource Access           |
|              |              |                  |             |            |                    |    | Functions into Software Applications                      |
|              |              |                  |             |            |                    |    | Power Sequencing by Slave Power Sequencers Sharing a      |
|              |              |                  |             |            |                    |    | Command Bus                                               |
| 84306414     | Application  |                  | 2/28/2013   |            | 201380070909.8     | CN | THREE-PHASE PARALLEL POWER CONVERTER LOAD                 |
|              |              |                  |             |            |                    |    | ADJUSTMENT                                                |
| 82186439     | Granted      | 200580015616.5   | 3/14/2005   | 6/16/2010  | 200580015616.5     | CN | Airflow Volume Control System                             |
| 82204046     | Granted      | 200680016682.9   | 3/17/2006   | 6/23/2010  | 200680016682.9     | CN | Cooling Fan With External Circuit Board                   |
| 82207292     | Granted      | 200780028959.4   | 8/1/2007    | 7/4/2012   | 200780028959.4     | CN | Cooling Fan Module                                        |
| 82208729     | Granted      | 200710167092.2   | 10/24/2007  | 6/6/2012   | 200710167092.2     | CN | Computer System Having Multi-direction Blower             |
| 83218685     | Published    |                  | 10/12/2010  |            | 201080069596       | CN | RESOURCE MANAGEMENT FOR DATA CENTERS                      |
| 83209013     | Allowed      |                  | 11/1/2010   |            | 201080069898.8     | CN | STORAGE ELEMENT READING USING RING OSCILLATOR             |
| 83974304     | Published    |                  | 1/31/2012   |            | 201280068687.1     | CN | SINGLE AND DOUBLE CHIP SPARE                              |
| 84075961     | Published    |                  | 7/27/2012   |            | 201280072884       | CN | SYSTEMS AND METHODS FOR DETECTING A DIMM SEATING          |
|              |              |                  |             |            |                    |    | ERROR                                                     |
| 84179370     | Published    |                  | 10/31/2012  |            | 201280076289.4     | CN | REPAIRING A MEMORY DEVICE                                 |
| 82656096     | Granted      | ZL200880131793.3 | 10/30/2008  | 42123      | 200880131793.3     | CN | Supply And Demand Consolidation In Employee Resource      |
|              |              |                  |             |            |                    |    | Planning                                                  |
| 83417889     | Published    |                  | 1/24/2011   |            | 201180065854.2     | CN | A SYSTEM AND METHOD FOR ACCESSING A SERVICE               |
| 84140100     | Published    |                  | 10/30/2012  |            | 201280075006.4     | CN | ANALYZING DATA WITH COMPUTER VISION                       |
| 82585359     | Granted      | ZL200980131796.1 | 8/4/2009    | 5/20/2015  | 200980131796.1     | CN | APPARATUS, AND ASSOCIATED METHOD, FOR TRACKING            |
|              |              |                  |             |            |                    |    | AIRCRAFT STATUS                                           |
| 82252802     | Granted      | 97181126.1       | 10/29/1997  | 40212      | 97181126.1         | CN | Distributed On-line Data Communications System And        |
|              |              |                  |             |            |                    |    | Method                                                    |
| 84226546     | Published    |                  | 10/26/2012  |            | 201280078014.4     | CN | PRODUCT INTELLIGENCE ENGINE                               |
| 82215848     | Granted      | 200780042621.4   | 9/14/2007   | 41185      | 200780042621.4     | CN | Apparatus And Method For Installing An Electrical Support |
|              |              |                  |             |            |                    |    | Structure                                                 |

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| 82844222     | Granted     | ZL200980159006.0 | 4/29/2009   | 4/9/2014   | 200980159006       | CN | Printed Circuit Board Cooling Assembly                                    |
| 82938265     | Published   |                  | 2/26/2010   |            | 201080064762.8     | CN | RESTORING STABILITY TO AN UNSTABLE BUS                                    |
| 83163772     | Published   |                  | 9/16/2010   |            | 201080069126.4     | CN | Power Capping System                                                      |
| 84095586     | Application |                  | 1/30/2015   |            | 201530028861.6     | CN | CABINET                                                                   |
| 84106346     | Published   |                  | 6/27/2012   |            | 201280073976       | CN | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                               |
| 82184192     | Granted     | 200410095761.6   | 11/19/2004  | 9/23/2009  | 200410095761.6     | CN | Printed Circuit Board Substrate And Method For Constructing Same          |
| 82240943     | Granted     | 200810149759     | 9/25/2008   | 6/5/2013   | 200810149759       | CN | Fifty Percent Duty Cycle Clock Divider Circuit And Method                 |
| 83091097     | Published   |                  | 4/30/2010   |            | 201080066518.5     | CN | Management Data Transfer Between Processors                               |
| 83167828     | Published   |                  | 10/16/2010  |            | 201080069646.5     | CN | DEVICE HARDWARE AGENT                                                     |
| 83543625     | Allowed     |                  | 4/7/2011    |            | 201180069787.1     | CN | SYSTEMS AND METHODS FOR DETERMINING A POWER PHASE AND/OR A PHASE ROTATION |
| 82193306     | Granted     | 200510118880.3   | 11/1/2005   | 39694      | 200510118880.3     | CN | A Method Of Copying Data In A Storage Network (as Amended)                |
| 82573265     | Granted     | 200880130176.1   | 7/2/2008    | 41535      | 200880130176.1     | CN | Verification Of Remote Copies Of Data                                     |
| 83952263     | Published   |                  | 5/1/2012    |            | 201280072823.4     | CN | PACKAGED MEMORY DIES THAT SHARE A CHIP SELECT LINE                        |
| 84141331     | Published   |                  | 12/21/2012  |            | 201280076543       | CN | MEMORY MODULE HAVING ERROR CORRECTION LOGIC                               |
| 82181384     | Granted     | 200510074631.9   | 5/24/2005   | 3/14/2012  | 200510074631.9     | CN | Passing Debug Information                                                 |
| 82200422     | Granted     | 200610074149.X   | 3/21/2006   | 11/4/2009  | 200610074149.X     | CN | Systems For Driving Data Over A Bus (as Amended)                          |
| 82895039     | Granted     | ZL200980161851.1 | 10/7/2009   | 42116      | 200980161851.1     | CN | Notification Protocol Based Endpoint Caching Of Host Memory               |
| 82934103     | Published   |                  | 1/29/2010   |            | 201080062651.3     | CN | Methods And Systems For An Interposer Board                               |
| 83962439     | Published   |                  | 1/6/2012    |            | 201280066072.5     | CN | CONNECTOR MODULES TO OPTICALLY CONNECT TO ELECTRONIC DEVICES              |
| 83962462     | Published   |                  | 1/6/2012    |            | 201280066058.5     | CN | CONNECTOR MODULE HAVING A MOVEABLE OPTICAL CONNECTOR                      |
| 84022814     | Published   |                  | 4/24/2012   |            | 201280071585.5     | CN | OPTICAL DATA INTERFACE WITH ELECTRICAL FORWARDED CLOCK                    |
| 90016451     | Application |                  | 9/24/2015   |            |                    | CN | Address Resolution In Software-Defined Networks                           |
| 82234700     | Granted     | ZL200780100697.8 | 9/18/2007   | 2/12/2014  | 200780100697.8     | CN | IDENTIFYING A SUBNET ADDRESS RANGE FROM DNS INFORMATION                   |
| 82274966     | Granted     | ZL200910139369.X | 5/13/2009   | 41941      | 200910139369.X     | CN | Open Network Connections                                                  |
| 82746392     | Granted     | ZL200880132584.0 | 12/30/2008  | 4/15/2015  | 200880132584       | CN | Storing Network Flow Information                                          |

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| 82808596     | Granted   | ZL200980158441.1 | 1/29/2009   | 5/20/2015  | 200980158441.1     | CN | Managing Security In A Network                                                                                                           |
| 82933914     | Published |                  | 10/28/2009  |            | 200980162190.4     | CN | Methods And Apparatus For Detection Of A Nat Device                                                                                      |
| 83271695     | Published |                  | 1/31/2011   |            | 201180066243.X     | CN | METHODS FOR HANDLING CONFLICTS IN A MULTICAST ROUTING ELECTION                                                                           |
| 83733002     | Published |                  | 8/8/2011    |            | 201180071506.6     | CN | FABRIC CHIP HAVING A PORT RESOLUTION MODULE                                                                                              |
| 83793434     | Published |                  | 9/28/2011   |            | 201180073165.6     | CN | MANAGING A SWITCH FABRIC                                                                                                                 |
| 84077604     | Published |                  | 7/31/2012   |            | 201280072889.3     | CN | MANAGING AN INTERFACE BETWEEN AN APPLICATION AND A NETWORK                                                                               |
| 84184508     | Published |                  | 9/27/2012   |            | 201280076093.5     | CN | TRANSMIT SPECIFIC TRAFFIC ALONG BLOCKED LINK                                                                                             |
| 82274036     | Granted   | 3815507.9        | 6/30/2003   | 40198      | 3815507.9          | CN | System and Method for Roaming Between Wireless Networks                                                                                  |
| 82934003     | Allowed   |                  | 1/31/2010   |            | 201080062834.5     | CN | METHOD AND SYSTEM FOR MANAGEMENT OF SAMPLED TRAFFIC DATA                                                                                 |
| 82235639     | Granted   | ZL200880128811.2 | 4/25/2008   | 41717      | 200880128811.2     | CN | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                                  |
| 82211417     | Granted   | 200610081960     | 5/12/2006   | 40758      | 200610081960       | CN | Information Sharing Between A Backup Storage Device And A Management Appliance                                                           |
| 82251935     | Granted   | 99811086.8       | 7/15/1999   | 40338      | 99811086.8         | CN | System And Method For Selectively Defining Access To Application Features                                                                |
| 82238072     | Granted   | ZL200880127851.5 | 3/6/2008    | 1/28/2015  | 200880127851.5     | CN | Prediction Of Systems Location Inside A Data Center By Using Correlation Coefficients                                                    |
| 82817461     | Granted   | ZL200980157958.9 | 3/13/2009   | 41773      | 200980157958.9     | CN | A PLURALITY OF SENSORS COUPLED TO A SERIES OF SWITCHING DEVICES                                                                          |
| 83164622     | Published |                  | 7/20/2010   |            | 201080069169.2     | CN | FORMATTING SYSTEM MONITORING INFORMATION                                                                                                 |
| 82241756     | Published |                  | 11/13/2008  |            | 200880116980.4     | CN | AUTOMATED RE-ORDERING OF COLUMNS FOR ALIGNMENT TRAP REDUCTION                                                                            |
| 83214669     | Published |                  | 11/12/2010  |            | 201080070102       | CN | DETERMINE AUTHORIZATION OF A SOFTWARE PRODUCT BASED ON A FIRST AND SECOND AUTHORIZATION ITEM                                             |
| 83108415     | Published |                  | 4/7/2010    |            | 201080065906.1     | CN | SYSTEM AND METHOD FOR AUTOMATED DISCOVERY OF CUSTOMER-EDGE DEVICES AND INTERFACE CONNECTIONS IN A VIRTUAL-PRIVATE-NETWORKING ENVIRONMENT |
| 83963501     | Published |                  | 1/20/2012   |            | 201280067637.1     | CN | STORAGE PROVISIONING NEGOTIATION                                                                                                         |
| 82239074     | Published |                  | 2/29/2008   |            | 200880127627.6     | CN | Identification Of Elements Of Currently-executing Component Script                                                                       |
| 83498527     | Published |                  | 2/18/2011   |            | 201180067784.4     | CN | GENERATING TEST DATA                                                                                                                     |
| 83543313     | Published |                  | 3/8/2011    |            | 201180069103.8     | CN | CREATING A TEST CASE                                                                                                                     |
| 82578990     | Granted   | ZL200880129806.3 | 6/13/2008   | 3/25/2015  | 200880129806.3     | CN | Hierarchical Policy Management                                                                                                           |

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| 84312769     | Application |                  | 1/29/2013   |            | 201380071708.X CN  | CN | ANALYZING STRUCTURE OF WEB APPLICATION                                                                                 |
| 82250621     | Granted     | ZL201010167179.1 | 4/20/2010   | 2/12/2014  | 201010167179.1 CN  | CN | Policy-provisioning                                                                                                    |
| 83195276     | Published   |                  | 10/13/2010  |            | 201080069153.1 CN  | CN | CREATING A CONFIGURATION FILE TEMPLATE                                                                                 |
| 82199987     | Granted     | 200510134014.3   | 12/19/2005  | 11/16/2011 | 200510134014.3 CN  | CN | Service Data Organization                                                                                              |
| 82229768     | Published   |                  | 1/29/2008   |            | 200880003497.5 CN  | CN | Service Routing For Communication Systems                                                                              |
| 82576202     | Published   |                  | 6/12/2009   |            | 200980122334.3 CN  | CN | Improvements In Or Relating To Communications                                                                          |
| 83271672     | Published   |                  | 3/30/2011   |            | 201180063108.X CN  | CN | SYSTEMS AND METHODS FOR GENERATING A SHORTENED NOTIFICATION OF AN INCOMING CALL                                        |
| 83694957     | Published   |                  | 10/24/2011  |            | 201180071744.7 CN  | CN | PROVIDE SERVICES USING UNIFIED COMMUNICATION CONTENT                                                                   |
| 84094527     | Published   |                  | 8/29/2012   |            | 201280073576.X CN  | CN | CIRCUIT-SWITCHED CALL DELIVERY                                                                                         |
| 82651098     | Granted     | ZL200880131341.5 | 9/30/2008   | 418/78     | 200880131341.5 CN  | CN | Authentication Of Services On A Partition                                                                              |
| 82192373     | Granted     | 200510079206.9   | 3/30/2005   | 3/25/2009  | 200510079206.9 CN  | CN | Method And System Of Determining Whether A User Program Has Made A System Level Call                                   |
| 82195496     | Granted     | 200510109832.8   | 8/4/2005    | 40394      | 200510109832.8 CN  | CN | Systems And Methods To Determine Processor Utilization                                                                 |
| 82201109     | Granted     | 200610006879.6   | 1/24/2006   | 39995      | 200610006879.6 CN  | CN | METHOD AND SYSTEM OF ALIGNING EXECUTION POINT OF DUPLICATE COPIES OF A USER PROGRAM                                    |
| 82227584     | Granted     | 200880016822.1   | 7/7/2008    | 6/6/2012   | 200880016822.1 CN  | CN | Data Packet Processing Method For A Multi Core Processor                                                               |
| 82811447     | Published   |                  | 1/29/2009   |            | 200980158542.9 CN  | CN | CONNECTING PORTS OF ONE OR MORE ELECTRONIC DEVICES TO DIFFERENT SUBSETS OF NETWORKS BASED ON DIFFERENT OPERATING MODES |
| 82853024     | Published   |                  | 3/25/2009   |            | 200980159504.5 CN  | CN | POWER DISTRIBUTION UNIT-DEVICE CORRELATION                                                                             |
| 81976418     | Granted     | 2128215.3        | 8/2/2002    | 1/4/2006   | 2128215.3 CN       | CN | System And Method For Developing Customized Integration Tests And Network Peripheral Device Evaluations                |
| 82257863     | Granted     | 2819445.4        | 7/24/2002   | 3/3/2010   | 2819445.4 CN       | CN | Block Data Storage Within A Computer Network                                                                           |
| 82239572     | Published   |                  | 11/8/2007   |            | 200780101491.7 CN  | CN | Navigational Ranking For Focused Crawling                                                                              |
| 83114223     | Published   |                  | 10/8/2010   |            | 201080067520.4 CN  | CN | DATA DEDUPLICATION                                                                                                     |
| 83229096     | Published   |                  | 10/19/2010  |            | 201080070780.7 CN  | CN | Managing Content From Structured And Unstructured Data Sources                                                         |
| 83933534     | Published   |                  | 10/27/2011  |            | 201180075990.X CN  | CN | Aligning Annotation of Fields of Documents                                                                             |
| 84208481     | Published   |                  | 9/30/2012   |            | 201280077404.X CN  | CN | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                                  |
| 83969744     | Published   |                  | 3/30/2012   |            | 201280068726.8 CN  | CN | AUTHORIZATION CACHE                                                                                                    |
| 84223068     | Application |                  | 6/30/2015   |            | 201510384886.9 CN  | CN | MANAGEMENT OF CRYPTOGRAPHIC KEYS                                                                                       |
| 84173791     | Published   |                  | 9/28/2012   |            | 201280076101.6 CN  | CN | LOCATION BASED ADVERTISING                                                                                             |
| 82195742     | Granted     | 200580045918.7   | 10/27/2005  | 6/20/2012  | 200580045918.7 CN  | CN | Methods And Systems For Controlling The Admission Of Media Content Into A Network                                      |

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| 82086050     | Granted      | 200680013948.4   | 4/25/2006   | 8/15/2012  | 200680013948.4     | CN | Three-dimensional Nanoscale Crossbars                                                             |
| 82223522     | Granted      | 200880012535.3   | 4/18/2008   | 3/27/2013  | 200880012535.3     | CN | COMPUTATIONAL NODES AND COMPUTATIONAL-NODE NETWORKS THAT INCLUDE DYNAMICAL-NANODEVICE CONNECTIONS |
| 82678340     | Granted      | 200880132493.7   | 12/23/2008  | 10/29/2014 | 200880132493.7     | CN | Memritive Device And Methods Of Making And Using The Same                                         |
| 83168698     | Published    |                  | 8/30/2010   |            | 201080068814.9     | CN | MULTILAYER MEMORY ARRAY                                                                           |
| 82744686     | Allowed      |                  | 1/12/2009   |            | 200980154309.3     | CN | Reducing Propagation Of Message Floods In Computer Networks                                       |
| 83034246     | Published    |                  | 4/30/2010   |            | 201080066517       | CN | Method For Routing Data Packets In A Fat Tree Network                                             |
| 83928313     | Published    |                  | 10/31/2011  |            | 201180076141.6     | CN | Reducing TCP Timeouts due to Incast Collapse at a Network Switch                                  |
| 84312663     | Application  |                  | 1/18/2013   |            |                    | CN | PREVENTING AN INPUT/OUTPUT BLOCKING ATTACK TO A WIRELESS ACCESS POINT                             |
| 90017141     | Acknowledged |                  | 1/31/2013   |            |                    | CN | Approximate Query Processing                                                                      |
| 90051001     | Acknowledged |                  | 3/7/2013    |            |                    | CN | CLOUD APPLICATION BANDWIDTH MODELING                                                              |
| 90056952     | Acknowledged |                  | 3/15/2013   |            |                    | CN | CLOUD-BASED CONNECTIVITY                                                                          |
| 82208357     | Granted      | 200680022355.4   | 6/21/2006   | 10/27/2010 | 200680022355.4     | CN | Integrated Circuit Device Having Optically Coupled Layers                                         |
| 82227773     | Granted      | 200880009047.7   | 3/21/2008   | 11/16/2011 | 200880009047.7     | CN | ELECTROMAGNETIC RADIATION AMPLIFICATION SYSTEMS BASED ON PHOTONIC GRATINGS                        |
| 82235141     | Granted      | 200880128462.4   | 1/31/2008   | 1/16/2013  | 200880128462.4     | CN | MODULAR DATA PROCESSING COMPONENTS AND SYSTEMS                                                    |
| 82238132     | Published    |                  | 1/30/2008   |            | 200880126067.2     | CN | OPTICAL INTERCONNECTS                                                                             |
| 82245002     | Granted      | 200880129034.3   | 5/6/2008    | 7/4/2012   | 200880129034.3     | CN | SYSTEM AND METHOD FOR MICRO RING LASER                                                            |
| 82405411     | Published    |                  | 5/8/2008    |            | 200880130267.5     | CN | Optical Polymorphic Computer Systems                                                              |
| 82595701     | Granted      | ZL200880130639.4 | 7/31/2008   | 8/6/2014   | 200880130639.4     | CN | Nano-wire Optical Block Devices For Amplifying, Modulating, And Detecting Optical Signals         |
| 82716631     | Granted      | ZL200880131815.6 | 10/31/2008  | 8/26/2015  | 200880131815.6     | CN | Variably Configurable Computer Buses                                                              |
| 82716697     | Published    |                  | 10/31/2008  |            | 200880131799       | CN | Optical Connector Interconnection System And Method                                               |
| 82790073     | Granted      | 200980157954     | 1/9/2009    | 4/16/2014  | 200980157954       | CN | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                  |
| 82805241     | Granted      | 200980155868.6   | 1/30/2009   | 2/11/2015  | 200980155868.6     | CN | PLASMONIC LIGHT EMITTING DIODE                                                                    |
| 82925991     | Allowed      |                  | 7/31/2009   |            | 200980160709.5     | CN | BEAM DIRECTION SENSOR                                                                             |
| 82930479     | Allowed      |                  | 10/29/2009  |            | 200980161185.1     | CN | OPTICAL DATA BUS AND METHOD                                                                       |
| 83566562     | Published    |                  | 9/17/2013   |            | 201310422439.9     | CN | Optical Broadcast With Buses With Shared Optical Interfaces                                       |
| 83835747     | Allowed      |                  | 9/6/2011    |            | 201180074113       | CN | MECHANICALLY ALIGNED OPTICAL ENGINE                                                               |
| 83858300     | Published    |                  | 10/21/2011  |            | 201180074221.8     | CN | GRATING COUPLERS WITH DEEP-GROOVE NON-UNIFORM GRATINGS                                            |

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| 83959940     | Published   |                  | 1/31/2012   |            | 201280065498.9 CN  | CN | APPARATUS FOR USE IN OPTOELECTRONICS                                                                               |
| 84112918     | Published   |                  | 7/30/2012   |            | 201280074270.6 CN  | CN | OPTICAL WAVEGUIDE                                                                                                  |
| 90041300     | Application |                  | 9/14/2015   |            | 201380074633 CN    | CN | BACKLIGHT HAVING COLLIMATING REFLECTOR                                                                             |
| 90041320     | Application |                  | 9/28/2015   |            |                    | CN | MODE CONVERSION FOR OPTICAL ISOLATION                                                                              |
| 84185029     | Published   |                  | 9/14/2012   |            | 201280076386.3 CN  | CN | DETERMINING A LOAD DISTRIBUTION FOR DATA UNITS A PACKET INSPECTION DEVICE                                          |
| 83738412     | Published   |                  | 7/29/2011   |            | 201180072676.6 CN  | CN | SYSTEMS AND METHODS FOR DISTRIBUTED RULE-BASED CORRELATION OF EVENTS                                               |
| 83789813     | Published   |                  | 8/24/2012   |            | 201280041621.3 CN  | CN | MULTIDIMENSION CLUSTERS FOR DATA PARTITIONING                                                                      |
| 83793354     | Published   |                  | 1/26/2012   |            | 201280068235.3 CN  | CN | CLUSTERING EVENT DATA BY MULTIPLE TIME DIMENSIONS                                                                  |
| 83927125     | Published   |                  | 12/20/2011  |            | 201180074636.5 CN  | CN | DISTRIBUTED EVENT PROCESSING                                                                                       |
| 84141288     | Published   |                  | 7/31/2012   |            | 201280074998.9 CN  | CN | Pattern Consolidation To Identify Malicious Activity                                                               |
| 90043610     | Application |                  | 3/11/2013   |            | 201380074551.6 CN  | CN | EVENT CORRELATION BASED ON CONFIDENCE FACTOR                                                                       |
| 82191371     | Granted     | 200510022801.9   | 12/5/2005   | 6/10/2009  | 200510022801.9 CN  | CN | Persistent Memory Manipulation Using EFI                                                                           |
| 83965894     | Published   |                  | 1/30/2012   |            | 201280068475.3 CN  | CN | BOOTING A SERVER USING A REMOTE READ-ONLY MEMORY IMAGE                                                             |
| 84291332     | Application |                  | 1/29/2013   |            | 201380071515.4 CN  | CN | ASSIGNING PROCESSORS TO MEMORY MAPPED CONFIGURATION                                                                |
| 90051522     | Application |                  | 3/28/2013   |            |                    | CN | IDENTIFYING MEMORY OF A BLADE DEVICE FOR USE BY AN OPERATING SYSTEM OF A PARTITION INCLUDING THE BLADE DEVICE      |
| 84160120     | Published   |                  | 8/16/2013   |            | 201380045398.4 CN  | CN | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                                                                   |
| 82241006     | Granted     | 200880129258.4   | 4/1/2008    | 10/9/2013  | 200880129258.4 CN  | CN | Management Of A 3D Package And Cooling System                                                                      |
| 82242506     | Granted     | ZL200880117051.5 | 9/19/2008   | 9/24/2014  | 200880117051.5 CN  | CN | Generating A Parallel Recovery Plan For A Data Storage System                                                      |
| 82243127     | Published   |                  | 4/10/2008   |            | 200880129741.2 CN  | CN | Virtual Machine Migration According To Environmental Data                                                          |
| 82245626     | Granted     | ZL200880130148.X | 4/30/2008   | 1/14/2015  | 200880130148.X CN  | CN | Intentionally Skewed Optical Clock Signal Distribution                                                             |
| 82692031     | Granted     | ZL200880131782.5 | 10/31/2008  | 7/15/2015  | 200880131782.5 CN  | CN | Prioritized Optical Arbitration Systems And Methods                                                                |
| 82756442     | Published   |                  | 7/29/2011   |            | 201110215012.2 CN  | CN | Detect Repeat Pattern On Web Page                                                                                  |
| 82925882     | Granted     | ZL200980161282.0 | 12/10/2009  | 2/11/2015  | 200980161282 CN    | CN | Fair Token Arbitration Systems And Methods                                                                         |
| 82929792     | Published   |                  | 3/7/2011    |            | 201180013079.6 CN  | CN | DATA STORAGE APPARATUS AND METHODS                                                                                 |
| 83769023     | Published   |                  | 7/27/2011   |            | 201180072605.6 CN  | CN | Efficient Data-Storage Devices that Include Memory Elements Characterized by Potentially Large Switching Latencies |

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| 83854725     | Published   |                  | 10/27/2011  |            | 201180074415.8     | CN | SHIFTABLE MEMORY SUPPORTING IN-MEMORY DATA STRUCTURES                                                      |
| 83881924     | Published   |                  | 10/28/2011  |            | 201180074489.1     | CN | ROW SHIFTING SHIFTABLE MEMORY                                                                              |
| 84223655     | Application |                  | 6/30/2015   |            |                    | CN | MANAGING AIRFLOW DISTRIBUTION THROUGH ADAPTIVE VENT TILES                                                  |
| 82936590     | Granted     | ZL200980161810.2 | 10/5/2009   | 4/22/2015  | 200980161810.2     | CN | Adjusting A Transducer Head For Transferring Data                                                          |
| 83818503     | Published   |                  | 11/16/2011  |            | 201180074262.7     | CN | Operation of Tape Drives                                                                                   |
| 82554424     | Granted     | 200880129898.5   | 6/20/2008   | 3/27/2013  | 200880129898.5     | CN | DOMAIN MANAGEMENT PROCESSOR                                                                                |
| 83166319     | Application |                  | 7/26/2010   |            | 201080068252.8     | CN | A System Including A Module                                                                                |
| 83199226     | Published   |                  | 6/19/2008   |            | 201310087375.1     | CN | Multi-blade Interconnector                                                                                 |
| 83784234     | Published   |                  | 2/25/2007   |            | 201410087641.5     | CN | Automated Cable Identification And Verification System                                                     |
| 83984196     | Published   |                  | 1/6/2012    |            | 201280066228.X     | CN | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION |
|              |             |                  |             |            |                    |    |                                                                                                            |
| 84044322     | Allowed     |                  | 12/17/2014  |            | 201430532954.8     | CN | HANDLE FOR A CARRIER                                                                                       |
| 84080529     | Published   |                  | 7/31/2012   |            | 201280072879.X     | CN | RECEIVING INPUT POWER MEASUREMENTS TO MANAGE A RECTIFIER                                                   |
| 84096762     | Application |                  | 12/17/2014  |            | 201430532851.1     | CN | HANDLE FOR A CARRIER                                                                                       |
| 84245415     | Published   |                  | 11/19/2012  |            | 201280077154       | CN | ELECTRICAL CONNECTORS FOR POWER SUPPLIES                                                                   |
| 90056880     | Application |                  | 4/3/2013    |            |                    | CN | Disabling Counterfeit Cartridges                                                                           |
| 82175879     | Granted     | 200510088233.2   | 7/29/2005   | 1/19/2011  | 200510088233.2     | CN | Crossbar Switch Debugging                                                                                  |
| 82199852     | Granted     | ZL200610006424.4 | 1/20/2006   | 10/29/2014 | 200610006424.4     | CN | Systems And Methods For Maintaining Performance                                                            |
| 82240625     | Granted     | 200880129081.8   | 5/8/2008    | 4/30/2014  | 200880129081.8     | CN | A Method For Interfacing A Fibre Channel Network With An Ethernet Based Network                            |
| 82893476     | Published   |                  | 7/31/2009   |            | 200980160725.4     | CN | Controlling A Virtual Machine                                                                              |
| 83092462     | Published   |                  | 12/16/2010  |            | 201080070696.5     | CN | A DETACHABLE LID                                                                                           |
| 82201358     | Granted     | 200510118886     | 11/1/2005   | 8/5/2009   | 200510118886       | CN | Recovery Operations In Storage Networks                                                                    |
| 82938216     | Published   |                  | 1/26/2010   |            | 201080062455.6     | CN | Heat Sink With Multiple Vapor Chambers                                                                     |
| 83873820     | Published   |                  | 10/25/2011  |            | 201180074439.3     | CN | DRIVE CARRIER SUBSTRATE                                                                                    |
| 84141193     | Published   |                  | 12/19/2012  |            | 201280076488.5     | CN | NVRAM PATH SELECTION                                                                                       |
| 84215531     | Application |                  | 3/28/2013   |            | 201380071543.6     | CN | ADDRESS RANGE TRANSFER FROM FIRST NODE TO SECOND NODE                                                      |
| 82241438     | Granted     | ZL200880126999.7 | 2/18/2008   | 2/11/2015  | 200880126999.7     | CN | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device            |
| 84057409     | Published   |                  | 4/25/2012   |            | 201280072656.3     | CN | ELECTRICAL/OPTICAL CONNECTOR                                                                               |
| 84073439     | Published   |                  | 4/30/2012   |            | 201280072767.4     | CN | FEEDBACK-BASED TRANS-IMPEDANCE AMPLIFIER WITH PROGRAMMABLE INPUT IMPEDANCE                                 |
| 84073516     | Published   |                  | 4/30/2012   |            | 201280072791.8     | CN | OPTICAL BASE LAYER                                                                                         |

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| 83507638     | Published    |                  | 3/15/2011   |            | 201180068900.4     | CN | Network Switching Device for Quantifying Available Service Level Capacity of a Network For Projected Network Traffic                   |
| 82206164     | Granted      | 200680037426.8   | 8/7/2006    | 5/11/2011  | 200680037426.8     | CN | Method For Reducing The Inductance In Series With A Decoupling Capacitor For A BGA Chip And Corresponding Assembly (as Amended By ISA) |
| 82273712     | Granted      | 2812705.6        | 5/16/2002   | 4/8/2009   | 2812705.6          | CN | AUTHENTICATION METHOD                                                                                                                  |
| 82772042     | Granted      | ZL200980155748.6 | 1/29/2009   | 7/15/2015  | 200980155748.6     | CN | Loading A Plurality Of Appliances Into A Blade                                                                                         |
| 83991378     | Published    |                  | 1/31/2012   |            | 201280068645.8     | CN | DETERMINATION OF SPOOFING OF A UNIQUE MACHINE IDENTIFIER                                                                               |
| 84017558     | Published    |                  | 3/26/2012   |            | 201280071318.8     | CN | FRAME PASSING BASED ON ETHERTYPE                                                                                                       |
| 84084087     | Published    |                  | 4/26/2012   |            | 201280072732       | CN | MULTICAST ROUTER TOPOLOGY DISCOVERY                                                                                                    |
| 84168246     | Published    |                  | 8/21/2012   |            | 201280076542.6     | CN | CONGESTION NOTIFICATION IN A NETWORK                                                                                                   |
| 90017158     | Acknowledged |                  | 1/31/2013   |            |                    | CN | NETWORK CONTROLLER PROVISIONED MACSEC KEYS                                                                                             |
| 90056986     | Acknowledged |                  | 6/14/2013   |            |                    | CN | LOOP-FREE HYBRID NETWORK                                                                                                               |
| 82274213     | Granted      | 200480010746.5   | 4/20/2004   | 4/28/2010  | 200480010746.5     | CN | Modular RF Antenna and Filter System for Dual Radio WLAN Access Points                                                                 |
| 83863415     | Application  |                  | 12/20/2011  |            | 201180076406.2     | CN | WIRELESS ACCESS POINT ALTERNATE SETTINGS                                                                                               |
| 83972798     | Published    |                  | 2/2/2012    |            | 201280068663.6     | CN | SYSTEMS AND METHODS FOR DATA CHUNK DEDUPPLICATION                                                                                      |
| 82585290     | Published    |                  | 10/12/2009  |            | 200980140622.1     | CN | SYSTEMS AND PROCESSES FOR SECURING SENSITIVE INFORMATION                                                                               |
| 82891309     | Granted      | ZL200980160667.5 | 7/29/2009   | 8/26/2015  | 200980160667.5     | CN | INTERFACING CLIMATE CONTROLLERS AND COOLING DEVICES                                                                                    |
| 84141276     | Published    |                  | 1/21/2013   |            | 201380060903.2     | CN | PALLETIZED LOAD REACTANT REGULATION HEATING CATALOGING BACKUP DATA                                                                     |
| 84141153     | Published    |                  | 10/31/2012  |            | 201280074957.X     | CN | Querying Structured And Unstructured Databases                                                                                         |
| 84156155     | Published    |                  | 8/29/2012   |            | 201280075523.1     | CN | Federated Configuration Data Management                                                                                                |
| 82243433     | Published    |                  | 10/30/2009  |            | 200910253086.8     | CN | Retrieving Configuration Records From A Configuration Management Database                                                              |
| 82676582     | Allowed      |                  | 10/15/2008  |            | 200880132346.X     | CN | SYSTEMS AND METHODS FOR SCHEDULING CHANGES PROVIDING APPLICATION CONTEXT FOR A CONVERSATION                                            |
| 83217746     | Published    |                  | 10/27/2010  |            | 201080069852.6     | CN | System And Method For Collecting Application Performance Data                                                                          |
| 83800106     | Published    |                  | 8/31/2011   |            | 201180073181.5     | CN | Tracking A Server Request                                                                                                              |
| 82821365     | Granted      | ZL200980160737.7 | 6/1/2009    | 8/6/2014   | 200980160737.7     | CN | TIME FRAME BASED DATA ANALYSIS                                                                                                         |
| 83141954     | Published    |                  | 6/30/2010   |            | 201080068862.8     | CN | AUTOMATED DETECTION OF A SYSTEM ANOMALY                                                                                                |
| 83681552     | Published    |                  | 3/30/2011   |            | 201180069897.8     | CN | RULE-BASED AUTOMATED TEST DATA GENERATION                                                                                              |
| 83816156     | Published    |                  | 9/21/2011   |            | 201180073608.1     | CN | PERSONALIZING SHARED COLLABORATION CONTENT                                                                                             |
| 84014750     | Published    |                  | 6/29/2012   |            | 201280074365.8     | CN |                                                                                                                                        |
| 84117615     | Published    |                  | 6/29/2012   |            | 201280074374.7     | CN |                                                                                                                                        |

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| 8423/629     | Published   |                  | 11/28/2012  |            | 201280077358.3     | CN | DETERMINING AT LEAST ONE COST FACTOR ASSOCIATED WITH USING THE CLOUD TO PROVIDE AN APPLICATION COMPONENT      |
| 842/4031     | Application |                  | 12/4/2012   |            | 201280078191.2     | CN | Displaying Information Technology Conditions with Heat Maps                                                   |
| 84312969     | Application |                  | 4/3/2013    |            |                    | CN | EXPLORATION MAPS FOR VISUALIZING SOFTWARE PROJECT KNOWLEDGE                                                   |
| 82926128     | Published   |                  | 11/23/2009  |            | 200980162565.7     | CN | System And Method For Object Identification In A User Interface                                               |
| 83108509     | Published   |                  | 4/10/2010   |            | 201080066099.5     | CN | INJECTION OF DATA INTO A SOFTWARE APPLICATION                                                                 |
| 83681489     | Published   |                  | 5/6/2011    |            | 201180070362.2     | CN | IMAGE-BASED AUTOMATION SYSTEMS AND METHODS                                                                    |
| 83991693     | Published   |                  | 1/26/2012   |            | 201280068226.4     | CN | IMAGE-BASED APPLICATION AUTOMATION                                                                            |
| 83992629     | Published   |                  | 1/31/2012   |            | 201280068686.7     | CN | CONTINUOUS DEPLOYMENT OF CODE CHANGES                                                                         |
| 84139610     | Published   |                  | 10/31/2012  |            | 201280074806.4     | CN | EXECUTABLE SOFTWARE SPECIFICATION GENERATION                                                                  |
| 90001171     | Application |                  | 2/27/2013   |            | 201380073928.6     | CN | DETERMINING EVENT AND INPUT COVERAGE METRICS FOR A GRAPHICAL USER INTERFACE CONTROL INSTANCE                  |
| 83721317     | Published   |                  | 5/31/2011   |            | 201180071246.2     | CN | AUTOMATED SECURITY TESTING                                                                                    |
| 84079530     | Published   |                  | 7/26/2012   |            | 201280072883.6     | CN | APPLICATION SECURITY TESTING                                                                                  |
| 82790814     | Granted     | ZL200980158275.5 | 1/23/2009   | 8/5/2015   | 200980158275.5     | CN | Verifying Virtual Machines                                                                                    |
| 83139747     | Published   |                  | 6/21/2010   |            | 201080068695.7     | CN | SYSTEM FOR TESTING AND CERTIFYING A VIRTUAL APPLIANCE ON A CUSTOMER COMPUTER SYSTEM                           |
| 83140165     | Published   |                  | 6/30/2010   |            | 201080067844.8     | CN | SYSTEM AND METHOD FOR SELF-SERVICE CONFIGURATION OF AUTHORIZATION                                             |
| 83141928     | Published   |                  | 6/30/2010   |            | 201080068865.1     | CN | SYSTEM AND METHOD FOR SERVICE RECOMMENDATION SERVICE                                                          |
| 83991730     | Published   |                  | 1/29/2012   |            | 201280068389.2     | CN | BEST-DEAL LIST GENERATION                                                                                     |
| 83992798     | Published   |                  | 12/3/2012   |            | 201280077489.1     | CN | BINDING OF APPLICATION AND INFRASTRUCTURE BLUEPRINTS                                                          |
| 84118574     | Published   |                  | 7/3/2012    |            | 201280074449.1     | CN | MANAGING A CLOUD SERVICE                                                                                      |
| 84118660     | Published   |                  | 7/3/2012    |            | 201280074453.8     | CN | MANAGING A MULTITENANT CLOUD SERVICE                                                                          |
| 84123194     | Published   |                  | 7/31/2012   |            | 201280075054.3     | CN | ABSTRACTION MODELS FOR MONITORING OF CLOUD RESOURCES                                                          |
| 84198279     | Published   |                  | 11/23/2012  |            | 201280076132.1     | CN | Dynamic Management Of A Cloud Computing Infrastructure                                                        |
| 90031032     | Application |                  | 3/15/2013   |            |                    | CN | Sending Encrypted Data to a Service Provider                                                                  |
| 82181060     | Granted     | 200510082264.7   | 6/30/2005   | 7/4/2012   | 200510082264.7     | CN | Telecommunications System And Method For Forwarding Messages Based Upon Subscriber Identification Information |
| 82242431     | Published   |                  | 1/24/2009   |            | 200910126750.2     | CN | Method And System For Accessing Applications                                                                  |

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| 82249862     | Published    |                  | 4/28/2010   |            | 201010171580.2     | CN | Packet Routing Method, Proxy Server And Apparatus                                                                                                     |
| 84077681     | Published    |                  | 7/31/2012   |            | 201280072897.8     | CN | GENERATING SERVICE REQUEST MESSAGE TO OBTAIN WIRELESS SERVICES USING A MINIMAL SET OF SERVICES THAT ARE DESIGNATED BY DEFAULT FOR A ROAMING CONDITION |
| 82208786     | Granted      | 200610088634.2   | 3/21/2006   | 3/24/2010  | 200610088634.2     | CN | Method And Apparatus For Direct Input And Output In Virtual Machine Environment                                                                       |
| 82214465     | Published    |                  | 12/11/2007  |            | 200780047149.3     | CN | Computer System And Method Of Control Thereof                                                                                                         |
| 82216022     | Granted      | 200710112166.2   | 6/19/2007   | 12/22/2010 | 200710112166.2     | CN | Discovering Software Code Subject To Licenses                                                                                                         |
| 82237943     | Granted      | 200810173958.5   | 10/31/2008  | 3/27/2013  | 200810173958.5     | CN | Dynamic Allocation Of Virtual Machine Device                                                                                                          |
| 84060077     | Published    |                  | 4/27/2012   |            | 201280072701.5     | CN | SHIELDING A MEMORY DEVICE                                                                                                                             |
| 84269700     | Application  |                  | 1/31/2013   |            | 201380072012.9     | CN | Mapping Mechanism for Large Shared Address Spaces                                                                                                     |
| 90028914     | Acknowledged |                  | 4/2/2013    |            |                    | CN | STATE-RETAINING LOGIC CELL                                                                                                                            |
| 82656084     | Published    |                  | 10/28/2008  |            | 200880132542.7     | CN | WORKFORCE PLANNING                                                                                                                                    |
| 83053673     | Published    |                  | 5/11/2010   |            | 201080065957.4     | CN | Software Application Testing                                                                                                                          |
| 83229090     | Published    |                  | 10/14/2010  |            | 201080070687.6     | CN | CONTINUOUS QUERYING OF A DATA STREAM                                                                                                                  |
| 83566616     | Published    |                  | 3/1/2011    |            | 201180070347.8     | CN | Pattern Recognition                                                                                                                                   |
| 84088670     | Published    |                  | 4/30/2012   |            | 201280074178.X     | CN | NOTIFICATION BASED ON AN EVENT IDENTIFIED FROM VIBRATION DATA                                                                                         |
| 83776053     | Published    |                  | 7/29/2011   |            | 201180072675.1     | CN | CREDENTIAL VALIDATION                                                                                                                                 |
| 84196696     | Published    |                  | 9/28/2012   |            | 201280077350.7     | CN | APPLICATION RANDOMIZATION                                                                                                                             |
| 82201544     | Granted      | 200680013546.4   | 4/19/2006   | 3/28/2012  | 200680013546.4     | CN | Multiplexer Interface To A Nanoscale-crossbar                                                                                                         |
| 82214714     | Granted      | 200780038466.9   | 10/16/2007  | 7/25/2012  | 200780038466.9     | CN | CROSSBAR-MEMORY SYSTEMS WITH NANOWIRE CROSSBAR JUNCTIONS                                                                                              |
| 82218833     | Granted      | 200780003630.2   | 1/26/2007   | 4/4/2012   | 200780003630.2     | CN | Mixed-scale Electronic Interface                                                                                                                      |
| 82226327     | Granted      | 200780044725.9   | 10/3/2007   | 2/27/2013  | 200780044725.9     | CN | Electrically Actuated Switch                                                                                                                          |
| 82244558     | Granted      | 200880119663.8   | 5/22/2008   | 11/21/2012 | 200880119663.8     | CN | HYBRID MICROSCALE-NANOSCALE NEUROMORPHIC INTEGRATED CIRCUIT                                                                                           |
| 82678331     | Granted      | ZL200880132544.6 | 10/29/2008  | 6/4/2014   | 200880132544.6     | CN | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein                                                               |
| 82918780     | Granted      | ZL200980161379.1 | 7/10/2009   | 7/15/2015  | 200980161379.1     | CN | MEMRISTIVE JUNCTION WITH INTRINSIC RECTIFIER                                                                                                          |
| 82924253     | Granted      | ZL200980160656.7 | 9/4/2009    | 7/15/2015  | 200980160656.7     | CN | MEMRISTORS BASED ON MIXED-METAL-VALENCE COMPOUNDS                                                                                                     |
| 83863037     | Published    |                  | 11/4/2011   |            | 201180074578.6     | CN | DECODER CIRCUITS HAVING METAL-INSULATOR-METAL THRESHOLD SWITCHES                                                                                      |
| 83933004     | Published    |                  | 12/12/2011  |            | 201180075205       | CN | MEMRISTORS AND METHODS OF FABRICATION                                                                                                                 |
| 84193759     | Published    |                  | 1/18/2013   |            | 201380056770.1     | CN | INTERCONNECTION ARCHITECTURE FOR MULTILAYER CIRCUITS                                                                                                  |

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| 82190990     | Granted     | 200580009708.2   | 1/28/2005   | 6/20/2012  | 200580009708.2     | CN | Selecting Nodes Close To Another Node In A Network Using Location Information For The Nodes                       |
| 82225388     | Granted     | 200710306845.3   | 10/26/2007  | 7/4/2012   | 200710306845.3     | CN | Computer System With Network Interface Retransmit COMMUNICATING DATA ASSOCIATED WITH DIFFERENT PERSONAS OF A USER |
| 84103151     | Published   |                  | 6/15/2012   |            | 201280073966.7     | CN | BANDWIDTH GUARANTEE AND WORK CONSERVATION Nonlinear Electromagnetic Quantum Information Processing                |
| 84103234     | Published   |                  | 7/31/2012   |            | 201280074280.X     | CN |                                                                                                                   |
| 82181501     | Granted     | 200580024861.2   | 6/28/2005   | 1/18/2012  | 200580024861.2     | CN |                                                                                                                   |
| 82198421     | Granted     | 200580046906.6   | 11/18/2005  | 8/3/2011   | 200580046906.6     | CN | Composite Material With Controllable Resonant Cells                                                               |
| 82230635     | Granted     | 200780023308.6   | 4/20/2007   | 7/11/2012  | 200780023308.6     | CN | Self-authenticating Quantum Random Bit Generators                                                                 |
| 82232504     | Granted     | 200880109804.8   | 7/30/2008   | 4/3/2013   | 200880109804.8     | CN | System And Methods For Routing Optical Signals                                                                    |
| 82233443     | Granted     | ZL200880120896.X | 10/15/2008  | 8/20/2014  | 200880120896.X     | CN | OPTICAL INTERCONNECT SYSTEM PROVIDING COMMUNICATION BETWEEN COMPUTER SYSTEM COMPONENTS                            |
| 82234943     | Granted     | 200880100998.5   | 7/30/2008   | 7/13/2011  | 200880100998.5     | CN | MICRORESONATOR SYSTEM AND METHODS OF FABRICATING THE SAME                                                         |
| 82235006     | Granted     | 200880112838.2   | 10/23/2008  | 7/25/2012  | 200880112838.2     | CN | Three-dimensional Die Stacks With Inter-device And Intra-device Optical Interconnect                              |
| 82235255     | Granted     | 200880100629.6   | 7/16/2008   | 5/30/2012  | 200880100629.6     | CN | Plasmon-enhanced Electromagnetic-radiation-emitting Devices And Methods For Fabricating The Same                  |
| 82240121     | Granted     | 200880112836.3   | 10/23/2008  | 12/11/2013 | 200880112836.3     | CN | Three-dimensional Memory Module Architectures                                                                     |
| 82243748     | Granted     | 200880129039.6   | 5/5/2008    | 11/28/2012 | 200880129039.6     | CN | NANOWIRE-BASED PHOTODIODE                                                                                         |
| 82774435     | Granted     | ZL200980153982.5 | 1/7/2009    | 7/8/2015   | 200980153982.5     | CN | PHOTONIC WAVEGUIDE                                                                                                |
| 82829672     | Allowed     |                  | 2/23/2009   |            | 200980158276.X     | CN | DYNAMIC IMPEDANCE PHOTODETECTOR RECEIVER CIRCUIT                                                                  |
| 82931415     | Granted     | 201080062576     | 1/29/2010   | 12/10/2014 | 201080062576       | CN | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER ARRAYS                                                           |
| 83699777     | Published   |                  | 4/20/2011   |            | 201180071008.1     | CN | SUB-WAVELENGTH GRATING-BASED OPTICAL ELEMENTS                                                                     |
| 83706043     | Published   |                  | 4/20/2011   |            | 201180071510.2     | CN | LIGHT-DETECTION SYSTEMS                                                                                           |
| 83932068     | Published   |                  | 12/9/2011   |            | 201180075153.7     | CN | Optical Connections                                                                                               |
| 83951464     | Published   |                  | 1/18/2012   |            | 201280062546.9     | CN | HIGH DENSITY LASER OPTICS                                                                                         |
| 83992360     | Published   |                  | 4/18/2012   |            | 201280068517.3     | CN | FLEXIBLE CIRCUIT CABLE WITH FLOATING CONTACT                                                                      |
| 84068278     | Published   |                  | 4/16/2012   |            | 201280072422.9     | CN | INTEGRATED OPTICAL SUB-ASSEMBLY                                                                                   |
| 90022754     | Application |                  | 8/31/2015   |            |                    | CN | RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH                                                                      |
| 90041277     | Application |                  | 9/14/2015   |            |                    | CN | COUPLED RING RESONATOR SYSTEM                                                                                     |
| 83131984     | Published   |                  | 6/10/2011   |            | 201180028615.X     | CN | QUERY PIPELINE                                                                                                    |
| 83137580     | Published   |                  | 6/1/2011    |            | 201180037823.6     | CN | Dynamic Multidimensional Schemas for Event Monitoring                                                             |
| 83682156     | Published   |                  | 4/29/2011   |            | 201180070497.9     | CN | SYSTEMS AND METHODS FOR IN-MEMORY PROCESSING OF EVENTS                                                            |

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| 84077641     | Published    |                   | 7/20/2012   |            | 201280072874.7 CN  | CN | POLICY-BASED SCALING OF NETWORK RESOURCES                                                                               |
| 83194912     | Published    |                   | 8/15/2011   |            | 201180045409.X CN  | CN | STORING ELECTRONIC CONTENT WITH TIME-VARYING PROPERTIES                                                                 |
| 82223396     | Granted      | ZL2007/80033921.6 | 7/11/2007   | 12/26/2012 | 200780033921.6 CN  | CN | DEFECT-AND-FAILURE-TOLERANT DEMULTIPLEXER USING SERIES REPLICATION AND ERROR-CONTROL ENCODING                           |
| 82239563     | Granted      | 2007/80101492.1   | 11/8/2007   | 10/30/2013 | 200780101492.1 CN  | CN | URL And Anchor Text Analysis For Focused Crawling                                                                       |
| 82242308     | Granted      | 200880129356.8    | 5/16/2008   | 4/23/2014  | 200880129356.8 CN  | CN | Provisioning A Geographical Image For Retrieval                                                                         |
| 83168801     | Published    |                   | 8/20/2010   |            | 201080068671.1 CN  | CN | SYSTEMS AND METHODS FOR FILTERING WEB PAGE CONTENTS                                                                     |
| 83988384     | Published    |                   | 4/25/2012   |            | 201280068619.5 CN  | CN | NETWORK MANAGEMENT                                                                                                      |
| 84077698     | Published    |                   | 6/8/2012    |            | 201280072796 CN    | CN | CHECKPOINTING USING FPGA                                                                                                |
| 84137057     | Published    |                   | 7/31/2012   |            | 201280075064.7 CN  | CN | SYSTEMS AND METHODS FOR CONTROLLING ACCESS TO A SHARED DATA STRUCTURE WITH READER-WRITER LOCKS USING MULTIPLE SUB-LOCKS |
| 84217901     | Published    |                   | 10/19/2012  |            | 201280077870.8 CN  | CN | ASYNCRONOUS CONSISTENT SNAPSHOTS IN PERSISTENT MEMORY STORES                                                            |
|              |              |                   |             |            |                    |    |                                                                                                                         |
| 84301124     | Application  |                   | 1/31/2013   |            | 201380072045.3 CN  | CN | ADAPTIVE -RANULARITY ROW BUFFER CACHE                                                                                   |
| 84304370     | Application  |                   | 1/9/2013    |            | 201380074429.9 CN  | CN | Characterizing Risks in Resource Distribution Systems                                                                   |
| 84306265     | Application  |                   | 3/20/2013   |            | 201380072040 CN    | CN | CACHING DATA IN A MEMORY SYSTEM HAVING MEMORY NODES AT DIFFERENT HIERARCHICAL LEVELS                                    |
| 90052801     | Acknowledged |                   | 3/14/2013   |            |                    | CN | MULTIVERSIONED NONVOLATILE MEMORY HIERARCHY FOR PERSISTENT MEMORY                                                       |
| 82817495     | Granted      | ZL200980157496.0  | 2/24/2009   | 1/7/2015   | 200980157496 CN    | CN | Method And System To Lower Power Consumption                                                                            |
| 82235315     | Granted      | 200880126791.5    | 2/15/2008   | 1/8/2014   | 200880126791.5 CN  | CN | Coolant Pulsing For Computer System                                                                                     |
| 83854693     | Published    |                   | 10/26/2011  |            | 201180074454.8 CN  | CN | Device for Cooling an Electronic Component in a Data Center                                                             |
| 84299272     | Application  |                   | 4/29/2013   |            | 201380071717.9 CN  | CN | RECORDING UNSTRUCTURED EVENTS IN CONTEXT                                                                                |
| 84274114     | Application  |                   | 6/30/2015   |            | 201380069466 CN    | CN | SYSTEMS AND METHODS FOR PREDICTIVE POWER MANAGEMENT IN A COMPUTING CENTER                                               |
| 84126783     | Published    |                   | 1/31/2013   |            | 201380062402.8 CN  | CN | MAGNETIC TAPE PROCESSING                                                                                                |
| 82237994     | Granted      | 2823231.3         | 9/20/2002   | 39239      | 2823231.3 CN       | CN | SYSTEM AND METHOD FOR IMPLEMENTING JOURNALING IN A MULTI-NODE ENVIRONMENT                                               |
| 83137886     | Published    |                   | 7/12/2010   |            | 201080067873.4 CN  | CN | FLEXIBLE DATA CENTER AND METHODS FOR DEPLOYMENT                                                                         |
| 84159541     | Published    |                   | 1/31/2013   |            | 201380062405.1 CN  | CN | CONTROLLED HEAT DELIVERY                                                                                                |
| 82554395     | Granted      | 200880129900.9    | 6/20/2008   | 41479      | 200880129900.9 CN  | CN | LOW LEVEL INITIALIZER                                                                                                   |
| 82855508     | Published    |                   | 6/19/2009   |            | 200980159964.8 CN  | CN | Pivoting Mounts For Media Drives                                                                                        |
| 82904513     | Published    |                   | 7/31/2009   |            | 200980160722 CN    | CN | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                      |

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| 82922581     | Published   |                  | 8/25/2009   |            | 200980161106.7 CN  | CN | Error Correcting                                                                                                           |
| 83693677     | Published   |                  | 6/30/2011   |            | 201180071656.7 CN  | CN | A MEMORY MODULE THAT INCLUDES A MEMORY MODULE COPY ENGINE FOR COPYING DATA FROM AN ACTIVE MEMORY DIE TO A SPARE MEMORY DIE |
| 84044310     | Application |                  | 1/30/2015   |            | 201530028935.6 CN  | CN | Eagle 2U storage Node - Design                                                                                             |
| 84191572     | Allowed     |                  | 5/28/2015   |            | 201530167367.8 CN  | CN | ROUTER                                                                                                                     |
| 84192674     | Published   |                  | 10/31/2012  |            | 201280076631 CN    | CN | MODULAR RACK SYSTEM                                                                                                        |
| 84275141     | Application |                  | 12/19/2012  |            | 201280077899.6 CN  | CN | HEAT REMOVAL ASSEMBLY                                                                                                      |
| 90049363     | Application |                  | 3/26/2013   |            |                    | CN | TOP LOADING CARTRIDGE                                                                                                      |
| 82243676     | Granted     | ZL200880128768.X | 4/23/2008   | 3/5/2014   | 200880128768.X CN  | CN | A Method And System For Forcing One Or More Power States On A Display                                                      |
| 82895030     | Granted     | ZL200980160899.0 | 8/11/2009   | 42158      | 200980160899 CN    | CN | Enclosure Airflow Controller                                                                                               |
| 83120657     | Published   |                  | 5/28/2010   |            | 201080067095.9 CN  | CN | INITIALIZING A MEMORY SUBSYSTEM OF A MANAGEMENT CONTROLLER                                                                 |
| 90016519     | Application |                  | 3/21/2013   |            | 201380074014.1 CN  | CN | USING A NETWORK SWITCH TO CONTROL A VIRTUAL LOCAL NETWORK IDENTITY ASSOCIATION                                             |
| 82258037     | Granted     | ZL200980105859.6 | 2/20/2009   | 41500      | 200980105859.6 CN  | CN | Method And System For Implementing A Virtual Storage Pool In A Virtual Environment                                         |
| 84140875     | Published   |                  | 9/6/2012    |            | 201280075248.3 CN  | CN | Scalable File System                                                                                                       |
| 84215519     | Application |                  | 3/28/2013   |            | 201380071540.2 CN  | CN | DATA FLUSH OF GROUP TABLE                                                                                                  |
| 82241552     | Granted     | ZL200880128265.2 | 3/25/2008   | 41507      | 200880128265.2 CN  | CN | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                                     |
| 82559516     | Published   |                  | 6/1/2008    |            | 200880130649.8 CN  | CN | Queue Sharing And Reconfiguration In PCI Express Links                                                                     |
| 82671982     | Granted     | ZL200880132801.6 | 12/15/2008  | 41822      | 200880132801.6 CN  | CN | Detecting An Unreliable Link In A Computer System                                                                          |
| 82892365     | Allowed     |                  | 7/15/2009   |            | 200980160437.9 CN  | CN | Shared Video Management Subsystem                                                                                          |
| 83980595     | Published   |                  | 2/24/2012   |            | 201280068698 CN    | CN | OPTICAL BLIND-MATE CONNECTOR                                                                                               |
| 84106328     | Published   |                  | 6/29/2012   |            | 201280074027.4 CN  | CN | GENERATION OF ACCESS POINT CONFIGURATION CHANGE BASED ON A GENERATED COVERAGE MONITOR                                      |
| 84126202     | Published   |                  | 7/9/2012    |            | 201280074610.5 CN  | CN | SITE MODEL SELECTION FOR A WIRELESS ACCESS POINT                                                                           |
| 82274954     | Granted     | ZL200910146274.0 | 6/26/2009   | 1/28/2015  | 200910146274 CN    | CN | Method for Implementing Distributed Voice Functions Into Software Applications                                             |
| 82715723     | Granted     | ZL200880131788.2 | 10/31/2008  | 41745      | 200880131788.2 CN  | CN | Method And Apparatus For Network Intrusion Detection                                                                       |
| 82866139     | Published   |                  | 5/19/2009   |            | 200980159202.8 CN  | CN | Network Traffic Rate Limiting System And Method                                                                            |
| 83425382     | Published   |                  | 2/10/2011   |            | 201180069365.4 CN  | CN | SYSTEMS, METHODS, AND APPARATUS TO AUTHENTICATE COMMUNICATIONS MODULES                                                     |
| 83425451     | Published   |                  | 2/18/2011   |            | 201180067359.5 CN  | CN | METHODS FOR CONTROLLING ELECTIONS IN A MULTICAST NETWORK                                                                   |

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| 84077509     | Published   |                  | 7/30/2012   |            | 201280072891       | CN | PROVIDER BRIDGED NETWORK COMMUNICATION                                                                               |
| 83991352     | Published   |                  | 1/27/2012   |            | 201280068085.6     | CN | INTELLIGENT EDGE DEVICE                                                                                              |
| 82233311     | Application |                  | 10/25/2007  |            | 200780101501.7     | CN | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                              |
| 84215505     | Application |                  | 4/30/2013   |            | 201380072014.8     | CN | GROUPING CHUNKS OF DATA INTO A COMPRESSION REGION                                                                    |
| 82257473     | Granted     | 200880116701.4   | 6/27/2008   | 6/3/2015   | 200880116701.4     | CN | APPARATUS, AND AN ASSOCIATED METHODOLOGY, FOR FACILITATING AUTHENTICATION USING A DIGITAL MUSIC AUTHENTICATION TOKEN |
| 82900878     | Granted     | ZL200980160602.0 | 7/31/2009   | 41801      | 200980160602       | CN | COMMISSIONING OF SENSORS                                                                                             |
| 83119180     | Allowed     |                  | 5/20/2010   |            | 201080066686.4     | CN | DATA CENTER COOLING                                                                                                  |
| 82104953     | Granted     | 100416559        | 3/15/2004   | 39694      | 200410030467.7     | CN | An Interactive Service Searching Method Using Meta-date Uds(guid)system                                              |
| 84312496     | Application |                  | 7/30/2015   |            | 201380071870.1     | CN | Sending a Request to a Management Service                                                                            |
| 83189164     | Allowed     |                  | 10/6/2010   |            | 201080068990.2     | CN | METHOD AND SYSTEM FOR PROCESSING EVENTS                                                                              |
| 83210538     | Published   |                  | 10/25/2010  |            | 201080069686.X     | CN | PROVIDING INFORMATION MANAGEMENT                                                                                     |
| 83487901     | Published   |                  | 3/17/2011   |            | 201180069276.X     | CN | DATA SOURCE ANALYTICS                                                                                                |
| 83193787     | Published   |                  | 9/1/2010    |            | 201080069933.6     | CN | PERFORMING WHAT-IF ANALYSIS                                                                                          |
| 83584503     | Published   |                  | 3/9/2011    |            | 201180069121.6     | CN | PERFORMING A CHANGE PROCESS BASED ON A POLICY                                                                        |
| 84046852     | Published   |                  | 3/30/2012   |            | 201280072103.8     | CN | ASSOCIATING AN APPLICATION WITH AN APPLICATION FILE                                                                  |
| 84139959     | Published   |                  | 9/27/2012   |            | 201280074807.9     | CN | CAPTURING AN APPLICATION STATE IN A CONVERSATION                                                                     |
| 82676536     | Published   |                  | 10/14/2008  |            | 200880132329.6     | CN | Managing Event Traffic In A Network System                                                                           |
| 83136077     | Published   |                  | 6/1/2010    |            | 201080068408.2     | CN | Methods, Apparatus, And Articles Of Manufacture To Deploy Software Applications                                      |
| 83185165     | Published   |                  | 8/26/2010   |            | 201080068756.X     | CN | ISOLATION OF PROBLEMS IN A VIRTUAL ENVIRONMENT                                                                       |
| 83691264     | Published   |                  | 4/4/2011    |            | 201180071393.X     | CN | CREATING A CORRELATION RULE DEFINING A RELATIONSHIP BETWEEN EVENT TYPES                                              |
| 84073055     | Published   |                  | 7/31/2012   |            | 201280072855.4     | CN | Constructing test-centric model of application                                                                       |
| 84162667     | Application |                  | 8/29/2012   |            | 201280076097.3     | CN | SECURITY SCAN BASED ON DYNAMIC TAINT                                                                                 |
| 84182372     | Application |                  | 9/28/2012   |            | 201280076151.4     | CN | Application Security Testing                                                                                         |
| 84118608     | Published   |                  | 7/3/2012    |            | 201280074441.5     | CN | MANAGING A HYBRID CLOUD SERVICE                                                                                      |
| 84252605     | Published   |                  | 12/3/2012   |            | 201280077486.8     | CN | ASYNCHRONOUS FRAMEWORK FOR MANAGEMENT OF IAAS                                                                        |
| 82176122     | Published   |                  | 7/11/2005   |            | 200510084699.5     | CN | Allocation Of Speech Recognition Tasks And Combination Of Results Thereof                                            |
| 82211897     | Granted     | 200680021439.6   | 4/3/2006    | 8/3/2011   | 200680021439.6     | CN | Multimedia Transfer For Wireless Networks                                                                            |
| 82219760     | Granted     | 200780003771.4   | 1/3/2007    | 40982      | 200780003771.4     | CN | Call Screening For VOIP Calls At Gateway                                                                             |
| 82223759     | Published   |                  | 10/1/2007   |            | 200780037548.1     | CN | Management Of Access To Address Data                                                                                 |



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| 82562762     | Published    |                  | 8/4/2009    |            | 200980131658.3     | CN | FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                                             |
| 84100729     | Published    |                  | 6/30/2012   |            | 201280073815.1     | CN | SYSTEM AND METHOD FOR VIRTUAL REPLICATION OF A MOBILE PHONE                                                  |
| 82188047     | Granted      | 200510116320.4   | 10/12/2005  | 5/5/2010   | 200510116320.4     | CN | Transparent Migration Of Files Among Various Types Of Storage Volumes Based On File Access Properties        |
| 82201094     | Granted      | 1811724          | 1/24/2006   | 8/3/2011   | 200610007183.5     | CN | Method And System Of Aligning Execution Point Of Duplicate Copies Of A User Program By Copying Memory Stores |
| 82653937     | Granted      | ZL200980155758.X | 1/30/2009   | 42102      | 200980155758.X     | CN | SYSTEM AND METHOD FOR INTEGRATING CAPACITY PLANNING AND WORKLOAD MANAGEMENT                                  |
| 83422491     | Published    |                  | 8/17/2011   |            | 201180067527       | CN | METHOD OF MANAGING USAGE RIGHTS IN A SHARE GROUP OF SERVERS                                                  |
| 83974283     | Published    |                  | 1/30/2012   |            | 201280068476.8     | CN | ESTABLISHING CONNECTIVITY OF MODULAR NODES IN A PRE-BOOT ENVIRONMENT                                         |
|              |              |                  |             |            |                    |    |                                                                                                              |
| 83165228     | Published    |                  | 7/22/2010   |            | 201080069230.3     | CN | Context-based Item Bookmarking                                                                               |
| 84078880     | Published    |                  | 6/8/2012    |            | 201280072847.X     | CN | PATIENT INFORMATION INTERFACE                                                                                |
| 84081210     | Published    |                  | 7/31/2012   |            | 201280072860.5     | CN | Concept Categorization                                                                                       |
| 84116398     | Published    |                  | 6/1/2012    |            | 201280074447.2     | CN | SHARING INFORMATION ABOUT RESOURCES IN A COLLABORATIVE ENVIRONMENT                                           |
|              |              |                  |             |            |                    |    |                                                                                                              |
| 84122544     | Published    |                  | 6/29/2012   |            | 201280075515.7     | CN | CAPACITY PLANNING SYSTEM                                                                                     |
| 84140165     | Published    |                  | 10/25/2012  |            | 201280075059.6     | CN | EVENT CORRELATION                                                                                            |
| 84210215     | Published    |                  | 10/18/2012  |            | 201280076487       | CN | COMMUNICATING TUPLES IN A MESSAGE                                                                            |
| 84237769     | Published    |                  | 10/31/2012  |            | 201280078093.9     | CN | Patient oriented hospital care approach and system                                                           |
| 84237912     | Application  |                  | 10/31/2012  |            | 201280078099.6     | CN | GENERATING AN OUTPUT BASED ON COLLECTING INFORMATION RELATING TO A CASE                                      |
|              |              |                  |             |            |                    |    |                                                                                                              |
| 83728679     | Published    |                  | 6/16/2011   |            | 201180071647.8     | CN | System and Method for Policy Generation                                                                      |
| 84301888     | Application  |                  | 3/28/2013   |            | 201380071993.5     | CN | Implementing Coherency with Reflective Memory                                                                |
| 90028902     | Acknowledged |                  | 4/1/2013    |            |                    | CN | External Memory Controller                                                                                   |
| 84077592     | Published    |                  | 7/31/2012   |            | 201280072876.6     | CN | SYSTEM ARCHITECTURE GENERATION                                                                               |
| 84304238     | Application  |                  | 7/29/2015   |            | 201380071711.1     | CN | FEDERATED SOCIAL MEDIA ANALYSIS SYSTEM AND METHOD THEREOF                                                    |
|              |              |                  |             |            |                    |    |                                                                                                              |
| 83991621     | Published    |                  | 2/27/2012   |            | 201280068644.3     | CN | METHOD AND SYSTEM FOR VEHICLE PERSONALIZATION                                                                |
| 82252856     | Granted      | 97181124.5       | 10/29/1997  | 40212      | 97181124.5         | CN | Fail-safe Event Driven Transaction Processing System And Method                                              |
|              |              |                  |             |            |                    |    |                                                                                                              |
| 84141084     | Published    |                  | 9/10/2012   |            | 201280075003       | CN | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                               |
| 84038219     | Published    |                  | 5/30/2012   |            | 201280072844.6     | CN | PARAMETER ADJUSTMENT FOR PATTERN DISCOVERY                                                                   |
| 84265735     | Published    |                  | 6/12/2015   |            | 201280077653.9     | CN | Distributed Pattern Discovery                                                                                |
| 82231937     | Granted      | 200880100626.2   | 6/13/2008   | 41297      | 200880100626.2     | CN | Centralized Server Rack Management Using USB                                                                 |
| 83874541     | Published    |                  | 10/28/2011  |            | 201180074473       | CN | Management of A Computer                                                                                     |

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| 84084127     | Published   |                  | 4/25/2012   |            | 201280072698.7     | CN | DYNAMIC MEMORY ALLOCATION                                                                     |
| 84283820     | Application |                  | 1/30/2013   |            | 201380071885.8     | CN | NON-VOLATILE MEMORY WRITE MECHANISM                                                           |
| 90049383     | Application |                  | 3/28/2013   |            |                    | CN | MAKING MEMORY OF COMPUTE AND EXPANSION BLADE DEVICES AVAILABLE FOR USE BY AN OPERATING SYSTEM |
| 84079590     | Published   |                  | 5/15/2012   |            | 201280072765.5     | CN | QUERY PROCESSING                                                                              |
| 84217958     | Published   |                  | 11/14/2012  |            | 201280077069.3     | CN | Updating Statistics in Distributed Databases                                                  |
| 90022848     | Application |                  | 2/7/2013    |            | 201380072533.4     | CN | Formatting Semi-Structured Data in a Database                                                 |
| 82195850     | Granted     | 200680022900.X   | 4/26/2006   | 5/19/2010  | 200680022900.X     | CN | Nanoscale Interconnection Interface                                                           |
| 82631627     | Granted     | 200880131355.7   | 7/31/2008   | 41654      | 200880131355.7     | CN | Multi-layer Reconfigurable Switches                                                           |
| 82925847     | Published   |                  | 9/4/2009    |            | 200980161240.7     | CN | SWITCHABLE JUNCTION WITH AN INTRINSIC DIODE FORMED WITH A VOLTAGE DEPENDENT RESISTOR          |
| 82930490     | Granted     | Z1200980161184.7 | 11/30/2009  | 41899      | 200980161184.7     | CN | REMAPPING FOR MEMORY WEAR LEVELING                                                            |
| 83255739     | Published   |                  | 1/31/2011   |            | 201180055717       | CN | Method and Circuit for Switching a Memristive Device                                          |
| 84020483     | Published   |                  | 4/25/2012   |            | 201280071789.9     | CN | NONLINEAR MEMRISTORS                                                                          |
| 84020503     | Published   |                  | 4/26/2012   |            | 201280071817.7     | CN | CUSTOMIZABLE NONLINEAR ELECTRICAL DEVICES                                                     |
| 82228130     | Granted     | Z1200880020035.4 | 4/2/2008    | 6/19/2013  | 200880020035.4     | CN | Available Bandwidth Estimation                                                                |
| 82766414     | Granted     | Z1200980154813.3 | 1/19/2009   | 42102      | 200980154813.3     | CN | Load Balancing                                                                                |
| 83034268     | Published   |                  | 5/20/2010   |            | 201080066907.8     | CN | SWITCHING IN A NETWORK DEVICE                                                                 |
| 84076490     | Published   |                  | 6/29/2012   |            | 201280072846.5     | CN | Wireless Network with Coordinated Sectors to Mitigate Interference                            |
| 82217390     | Granted     | 200680037481.7   | 8/11/2006   | 12/14/2011 | 200680037481.7     | CN | Quantum Repeater                                                                              |
| 82219139     | Granted     | 200780023478.4   | 4/20/2007   | 11/17/2010 | 200780023478.4     | CN | Optical-based, Self-authenticating Quantum Random Number Generators                           |
| 82230374     | Granted     | 200880021368.9   | 6/16/2008   | 10/19/2011 | 200880021368.9     | CN | OPTICAL INTERCONNECT                                                                          |
| 82230566     | Granted     | 200880024854.6   | 7/16/2008   | 6/26/2013  | 200880024854.6     | CN | Optical Device Including Waveguide Grating Structure                                          |
| 82239494     | Granted     | 200880128457.3   | 1/31/2008   | 3/27/2013  | 200880128457.3     | CN | FREE SPACE OPTICAL INTERCONNECT                                                               |
| 82243361     | Granted     | Z1200880122377.7 | 10/23/2008  | 4/16/2014  | 200880122377.7     | CN | Photonic Interconnects For Computer System Devices                                            |
| 82245482     | Granted     | 200880129056.X   | 5/7/2008    | 4/16/2014  | 200880129056.X     | CN | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                              |
| 82405419     | Granted     | 200880130269.4   | 5/9/2008    | 3/11/2015  | 200880130269.4     | CN | Optical Splitter Device                                                                       |
| 82554381     | Granted     | 200880130477.4   | 5/23/2008   | 9/25/2013  | 200880130477.4     | CN | Optical Interconnect                                                                          |
| 82654452     | Granted     | Z1200880130978.2 | 9/4/2008    | 41437      | 200880130978.2     | CN | Dielectric Waveguide Intersection With Reduced Losses                                         |
| 83734816     | Published   |                  | 5/23/2011   |            | 201180071831.2     | CN | OPTICAL TRANSMISSION SYSTEM                                                                   |
| 83862158     | Published   |                  | 11/1/2011   |            | 201180074425.1     | CN | DIRECT MODULATED LASER                                                                        |

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|--------------|-------------|------------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------|
| 83959965     | Published   |                  | 1/31/2012   |            | 201280065738.5     | CN | OPTICAL ARCHITECTURES, OPTICAL DISTRIBUTION MATTERIES AND METHODS OF MANUFACTURING OPTICAL STRUCTURES |
| 84195004     | Published   |                  | 1/28/2013   |            | 201380057209.5     | CN | RADIUSED ALIGNMENT POST FOR SUBSTRATE MATERIALS                                                       |
| 82631607     | Granted     | ZL200880131798.6 | 10/30/2008  | 42186      | 200880131798.6     | CN | RECONFIGURING A MODEL                                                                                 |
| 83174557     | Published   |                  | 7/30/2010   |            | 201080069333.X     | CN | CONFIGURATION MANAGEMENT                                                                              |
| 84076338     | Published   |                  | 6/25/2012   |            | 201280072838       | CN | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                                            |
| 82240991     | Granted     | ZL200880129631.6 | 4/4/2008    | 4/22/2015  | 200880129631.6     | CN | DC-TO-DC CONVERTER WITH INDEPENDENT COMPENSATION LOGIC                                                |
| 82671976     | Granted     | ZL200880132288.0 | 12/9/2008   | 42032      | 200880132288       | CN | Power Circuit                                                                                         |
| 82901705     | Published   |                  | 1/29/2010   |            | 201080033493.9     | CN | Managing Electric Energy Distribution To Multiple Loads Using Selective Capping                       |
| 83140714     | Published   |                  | 10/26/2010  |            | 201080069805.1     | CN | BACKUP POWER SUPPLY SYSTEMS AND METHODS                                                               |
| 83787451     | Granted     | ZL201430045309.3 | 3/10/2014   | 42130      | 201430045309.3     | CN | FRONT BEZEL FOR AN UNINTERRUPTIBLE POWER SYSTEMS (UPS) RACK AND TOWER                                 |
| 84291317     | Application |                  | 1/21/2013   |            | 201380071035.8     | CN | POWER FACTOR CORRECTOR POWER SHARING                                                                  |
| 82240364     | Granted     | ZL200880128642.2 | 4/14/2008   | 41668      | 200880128642.2     | CN | Fan For Computer Element In The Service Position                                                      |
| 82580950     | Published   |                  | 7/31/2008   |            | 200880130664.2     | CN | Heatsink With A Plurality Of Fans                                                                     |
| 84252648     | Published   |                  | 12/19/2012  |            | 201280077884.X     | CN | MULTI-CHANNEL CONVERSATION                                                                            |
| 82184306     | Granted     | 200580036905.3   | 8/18/2005   | 8/4/2010   | 200580036905.3     | CN | Mapping Power System Componets                                                                        |
| 82207649     | Granted     | 200680050186.5   | 11/1/2006   | 7/4/2012   | 200680050186.5     | CN | Cooling Components Across A Continuum                                                                 |
| 82241306     | Granted     | 200880127257.6   | 2/22/2008   | 11/28/2012 | 200880127257.6     | CN | Detecting Anomalies In A Sensor Networked Environment                                                 |
| 82573980     | Granted     | 200880130224.7   | 6/30/2008   | 41444      | 200880130224.7     | CN | Cooling Medium Distribution Over A Network Of Passages                                                |
| 83769071     | Published   |                  | 7/27/2011   |            | 201180072584.8     | CN | Method and System for Reducing Write-Buffer Capacities within Memristor-Based Data-Storage Devices    |
| 83881886     | Published   |                  | 10/27/2011  |            | 201180074427       | CN | SHIFTABLE MEMORY EMPLOYING RING REGISTERS                                                             |
| 83988352     | Published   |                  | 4/24/2012   |            | 201280068655.1     | CN | IDENTIFYING NETWORK COMMUNICATION PATTERNS                                                            |
| 84115691     | Published   |                  | 6/8/2012    |            | 201280075200.2     | CN | AUGMENTING MEMORY CAPACITY FOR KEY VALUE CACHE                                                        |
| 84115714     | Published   |                  | 6/8/2012    |            | 201280075199.3     | CN | ACCESSING MEMORY                                                                                      |
| 84140128     | Published   |                  | 10/31/2012  |            | 201280075044.X     | CN | Combined Block-Style Error Correction                                                                 |
| 84304470     | Application |                  | 1/31/2013   |            | 201380072021.8     | CN | SELECTING CIRCUITS OF A MULTI-LEVEL INTEGRATED CIRCUIT                                                |
| 84304487     | Application |                  | 3/15/2013   |            | 201380072007.8     | CN | MEMORY MODULE CONTROLLER SUPPORTING EXTENDED WRITES                                                   |

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| 83663203     | Published   |                  | 6/8/2011    |            | 201180071446.8     | CN | Determining and Visualizing Social Media Expressed Sentiment                                                                |
| 84080912     | Published   |                  | 7/30/2012   |            | 201280072817.9     | CN | SEARCH METHOD                                                                                                               |
| 90016556     | Application |                  | 1/29/2013   |            | 201380071738       | CN | METHODS AND SYSTEMS FOR SHARED FILE STORAGE                                                                                 |
| 82237733     | Published   |                  | 12/20/2007  |            | 200780102376.1     | CN | MODELLING COMPUTER BASED BUSINESS PROCESS FOR CUSTOMISATION AND DELIVERY                                                    |
| 82678090     | Granted     | ZL200980138894.8 | 7/22/2009   | 41941      | 200980138894.8     | CN | OKD Transmitter And Transmission Method                                                                                     |
| 83093240     | Published   |                  | 6/23/2010   |            | 201080068733.9     | CN | Authorization Control                                                                                                       |
| 84312822     | Application |                  | 1/31/2013   |            | 201380072035.X     | CN | TARGETED SECURITY ALERTS                                                                                                    |
| 82675339     | Granted     | ZL200980148656.5 | 11/13/2009  | 41661      | 200980148656.5     | CN | Data Centre And Apparatus And Method For Data Centre Cooling                                                                |
| 82676467     | Granted     | ZL200980143345.X | 10/21/2009  | 42165      | 200980143345.X     | CN | DATA CENTER AND DATA CENTER DESIGN                                                                                          |
| 82180985     | Granted     | 200710184977.3   | 10/31/2007  | 8/3/2011   | 200710184977.3     | CN | Cache Memory System And Method For Providing Transactional Memory                                                           |
| 83038178     | Granted     | 201230416492.4   | 8/31/2012   | 3/27/2013  | 201230416492.4     | CN | A Removable Bezel of a Computing Device with an LCD Display                                                                 |
| 83136234     | Published   |                  | 6/7/2010    |            | 201080067287.X     | CN | MODULE AND PORT                                                                                                             |
| 83543103     | Published   |                  | 4/27/2011   |            | 201180069645.5     | CN | Rotational Lockout                                                                                                          |
| 84078665     | Published   |                  | 5/24/2012   |            | 201280072764       | CN | Fiber Connector Assembly                                                                                                    |
| 84104739     | Published   |                  | 8/17/2012   |            | 201280074489.6     | CN | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY |
| 90056364     | Application |                  | 4/3/2013    |            |                    | CN | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                                 |
| 82187975     | Granted     | 200610100120.4   | 6/27/2006   | 9/1/2010   | 200610100120.4     | CN | Centralized Hot-pluggable Video And KVM                                                                                     |
| 82233743     | Granted     | 200880100401.7   | 5/21/2008   | 7/18/2012  | 200880100401.7     | CN | TAMPER-EVIDENT CONNECTOR                                                                                                    |
| 82237859     | Published   |                  | 2/15/2008   |            | 200880126784.5     | CN | Changing Power States Of Data-handling Devices To Meet Redundancy Criterion                                                 |
| 82240607     | Granted     | ZL200880127959.4 | 3/10/2008   | 41437      | 200880127959.4     | CN | Cable Management Module                                                                                                     |
| 82897849     | Granted     | 201130506676.5   | 12/30/2011  | 41094      | 201130506676.5     | CN | Hard Drive Carrier                                                                                                          |
| 83786712     | Published   |                  | 12/13/2011  |            | 201180072861.5     | CN | STORAGE CONTROLLER WITH HOST COLLABORATION FOR INITIALIZATION OF A LOGICAL VOLUME                                           |
| 83951303     | Published   |                  | 2/22/2012   |            | 201280068625       | CN | MULTIPLEXER FOR SIGNALS ACCORDING TO DIFFERENT PROTOCOLS                                                                    |
| 82232801     | Granted     | 200880100415.9   | 5/27/2008   | 41262      | 200880100415.9     | CN | Systems And Methods For Improving Performance Of A Routable Fabric                                                          |

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| 82241672     | Granted     | ZL200880130063.1 | 4/28/2008   | 41822      | 200880130063.1     | CN | Method And System For Generating And Delivering Interruptions In A Multi-core Processor And In Cellular Shared-memory Multi-processor Systems |
| 82716607     | Published   |                  | 10/30/2008  |            | 200880131789.7     | CN | BIT Inversion For Communication Interface                                                                                                     |
| 83965930     | Published   |                  | 1/31/2012   |            | 201280068651.3     | CN | CONNECTOR INDICIA                                                                                                                             |
| 83984350     | Published   |                  | 4/12/2012   |            | 201280068732.3     | CN | RECONFIGURATION OF AN OPTICAL CONNECTION INFRASTRUCTURE                                                                                       |
| 84027702     | Published   |                  | 4/25/2012   |            | 201280071724.4     | CN | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                                                             |
| 84056063     | Published   |                  | 4/25/2012   |            | 201280072650.6     | CN | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                                                             |
| 84269665     | Application |                  | 1/30/2013   |            | 201380071906.6     | CN | OPTICAL CONNECTOR HAVING A CLEANING ELEMENT                                                                                                   |
| 83220854     | Published   |                  | 10/26/2010  |            | 201080069860       | CN | METHODS AND SYSTEMS FOR DETECTING SUSPECTED DATA LEAKAGE USING TRAFFIC SAMPLES                                                                |
|              |             |                  |             |            |                    |    |                                                                                                                                               |
| 82274633     | Granted     | 200610137341.9   | 10/13/2006  | 41059      | 200610137341.9     | CN | Method and System for Using a Packet-Network Telephone to Schedule a Conference Call                                                          |
| 83135879     | Published   |                  | 7/29/2010   |            | 201080068321.5     | CN | A Device And Method For Egress Packet Forwarding Using Mesh Tagging                                                                           |
| 83977168     | Application |                  | 12/21/2011  |            | 201180076424       | CN | PROPER INSTALLATION DETERMINATION BASED ON RFID                                                                                               |
| 83991406     | Published   |                  | 4/26/2012   |            | 201280068488       | CN | MULTICAST ROUTING PATH CHECK                                                                                                                  |
| 82274135     | Granted     | 3815527.3        | 6/30/2003   | 40198      | 3815527.3          | CN | System and Method for a Universal Wireless Access Gateway                                                                                     |
| 84016713     | Published   |                  | 2/29/2012   |            | 201280070811.8     | CN | INFORMATION TRANSMISSION FROM WIRELESS ACCESS POINT                                                                                           |
| 82837122     | Granted     | ZL200980158509.6 | 3/30/2009   | 42221      | 200980158509.6     | CN | Deduplication Of Data Stored In A Copy Volume                                                                                                 |
| 83952325     | Published   |                  | 3/15/2012   |            | 201280068730.4     | CN | Accessing And Replicating Backup Data Objects                                                                                                 |
| 84141238     | Published   |                  | 10/31/2012  |            | 201280075493.4     | CN | THERMAL STABILIZATION SHIPPING SYSTEM AND METHOD                                                                                              |
| 82852402     | Granted     | ZL200980160715.0 | 7/31/2009   | 42053      | 200980160715       | CN | Compression Of XML Data                                                                                                                       |
| 83442153     | Published   |                  | 3/3/2011    |            | 201180067773.6     | CN | RECORDS MANAGEMENT SYSTEM                                                                                                                     |
| 83995425     | Published   |                  | 4/9/2012    |            | 201280068481.9     | CN | CREATING AN ARCHIVAL MODEL                                                                                                                    |
| 84079561     | Published   |                  | 5/15/2012   |            | 201280072816.4     | CN | PATTERN MINING BASED ON OCCUPANCY                                                                                                             |
| 84289436     | Application |                  | 7/22/2015   |            |                    | CN | STORING BACKUP DATA SEPARATE FROM CATALOG DATA                                                                                                |
| 84312536     | Application |                  | 7/31/2015   |            | 201380071986.5     | CN | SELECTING A BACKUP TYPE BASED ON CHANGED DATA                                                                                                 |
| 82241795     | Granted     | 200880117052.X   | 11/13/2008  | 41171      | 200880117052.X     | CN | Allocation Of Resources For Concurrent Query Execution Via Adaptive Segmentation                                                              |
| 83118736     | Published   |                  | 5/27/2010   |            | 201080067069.6     | CN | Bundling Configuration Items Into A Composite Configuration Item                                                                              |
| 83854661     | Published   |                  | 9/30/2011   |            | 201180073793.4     | CN | EXTENDING A CONVERSATION ACROSS APPLICATIONS                                                                                                  |

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| 83184704     | Published   |                  | 8/6/2010    |            | 201080069452.5     | CN | SYSTEM AND METHODS FOR APPORTIONING POWER CONSUMPTION                                    |
| 83209547     | Published   |                  | 12/20/2010  |            | 201080070088.4     | CN | METHOD OF PROVISIONING ADDITIONAL STORAGE TO COMPUTER APPLICATIONS                       |
| 83617587     | Published   |                  | 3/17/2011   |            | 201180069346.1     | CN | SELF-ORGANIZATION OF A SATELLITE GRID                                                    |
| 83789789     | Published   |                  | 7/29/2011   |            | 201180073768.6     | CN | MIGRATING VIRTUAL MACHINES                                                               |
| 83799679     | Published   |                  | 7/31/2011   |            | 201180073873.X     | CN | INCIDENT HANDLING                                                                        |
| 83883792     | Published   |                  | 10/10/2011  |            | 201180075413       | CN | Methods And Systems For Planning Execution Of An Application In A Cloud Computing System |
| 84273827     | Application |                  | 12/4/2012   |            | 201280078189.5     | CN | Determining Suspected Root Causes of Anomalous Network Behavior                          |
| 83987158     | Published   |                  | 1/23/2012   |            | 201280067942       | CN | IDENTIFYING A POLLING COMMUNICATION PATTERN                                              |
| 84071961     | Published   |                  | 4/23/2012   |            | 201280072829.1     | CN | SOFTWARE DEFECT VERIFICATION                                                             |
| 84312699     | Application |                  | 2/28/2013   |            | 201380071978       | CN | DETERMINING COVERAGE OF DYNAMIC SECURITY SCANS USING RUNTIME AND STATIC CODE ANALYSES    |
| 82890401     | Published   |                  | 5/29/2009   |            | 200980159582.5     | CN | System And Method For Allocating Resources Of A Server To A Virtual Machine              |
| 83147717     | Published   |                  | 6/7/2011    |            | 201180036366.9     | CN | METHOD AND SYSTEM FOR DEPLOYING SaaS (software As A Service) SERVICE BUNDLES             |
| 83140442     | Published   |                  | 6/30/2010   |            | 201080067848.6     | CN | SYSTEM AND METHOD FOR AN AUTOMATED DATA DISCOVERY SERVICE                                |
| 83142019     | Published   |                  | 7/1/2010    |            | 201080068857.7     | CN | Migrating Artifacts Between Service-oriented Architecture Repositories                   |
| 84092605     | Published   |                  | 6/8/2012    |            | 201280073806.2     | CN | CLOUD APPLICATION DEPLOYMENT                                                             |
| 84137291     | Published   |                  | 10/10/2012  |            | 201280077596.4     | CN | IDENTIFYING REPORTS TO ADDRESS NETWORK ISSUES                                            |
| 84148234     | Published   |                  | 8/13/2012   |            | 201280075302.4     | CN | PERFORMANCE TESTS IN A CONTINUOUS DEPLOYMENT PIPELINE                                    |
| 82168937     | Granted     | 200410048980.9   | 6/10/2004   | 40170      | 200410048980.9     | CN | Software Authentication For Mobile Communication Devices                                 |
| 82171187     | Granted     | 200410088376.9   | 11/3/2004   | 7/29/2009  | 200410088376.9     | CN | Selective Message Discard                                                                |
| 82181924     | Granted     | 200480034521.3   | 7/23/2004   | 40625      | 200480034521.3     | CN | Methods And Apparatus For Controlling Signalling Gateways                                |
| 82186730     | Granted     | 200480032570.3   | 7/12/2004   | 41157      | 200480032570.3     | CN | Method And Apparatus For Load-balancing                                                  |
| 82230494     | Granted     | ZL200880003158.7 | 1/23/2008   | 41430      | 200880003158.7     | CN | PAUSING CALL PROCESSING TO ENABLE THE PLAYBACK OF INFORMATION                            |
| 82805177     | Granted     | ZL201080006144.8 | 1/26/2010   | 41899      | 201080006144.8     | CN | Communications System And Method                                                         |
| 82241417     | Granted     | ZL200880127526.9 | 2/26/2008   | 42018      | 200880127526.9     | CN | Method And Apparatus For Performing A Host Enumeration Process                           |
| 83123499     | Published   |                  | 5/13/2010   |            | 201080066763.6     | CN | FILE SYSTEM MIGRATION                                                                    |

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|--------------|--------------|----------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82225436     | Granted      | 200810009510.x | 1/25/2008   | 41248      | 200810009510.x     | CN | MEMORY MODULE AND METHOD EMPLOYING A MULTIPLEXER TO REPLACE A MEMORY DEVICE                                                                                                 |
| 84123806     | Published    |                | 10/22/2012  |            | 201280074861.3     | CN | PERFORMING REFRESH OF A MEMORY DEVICE IN RESPONSE TO ACCESS OF DATA                                                                                                         |
| 90022713     | Application  |                | 3/27/2013   |            |                    | CN | Non-Volatile Memory Based Synchronous Logic                                                                                                                                 |
| 90025965     | Application  |                | 3/28/2013   |            |                    | CN | Shared Memory System                                                                                                                                                        |
| 90048541     | Acknowledged |                | 4/30/2013   |            |                    | CN | Coalescing Memory Access Requests                                                                                                                                           |
| 83255607     | Published    |                | 1/27/2011   |            | 201180063114.5     | CN | ELECTRONIC BOOK WITH CHANGEABLE PATHS                                                                                                                                       |
| 84306287     | Application  |                | 1/22/2013   |            | 201380070464.3     | CN | DETERMINING A REMEDIAL ACTION FOR A MOTORIZED VEHICLE BASED ON SENSED VIBRATION                                                                                             |
| 82848363     | Published    |                | 5/8/2009    |            | 200980159178.8     | CN | ACCESS CONTROL OF DISTRIBUTED COMPUTING RESOURCES                                                                                                                           |
| 83127143     | Published    |                | 6/22/2010   |            | 201080067619.4     | CN | SYSTEM AND METHOD                                                                                                                                                           |
| 84306373     | Application  |                | 7/30/2015   |            | 201380071849.1     | CN | METHODS AND SYSTEMS FOR PLANNING APPLICATION DEPLOYMENT                                                                                                                     |
| 82257530     | Granted      | 200980117604.1 | 7/15/2008   | 41843      | 200980117604.1     | CN | SYSTEMS AND METHODS FOR DETERMINING COMPATIBILITY BETWEEN SOFTWARE LICENSES                                                                                                 |
| 82257650     | Granted      | 200980117602.2 | 7/25/2008   | 42025      | 200980117602.2     | CN | ARCHITECTURE FOR SERVICE ORIENTED ARCHITECTURE (SOA) SOFTWARE FACTORIES                                                                                                     |
|              |              |                |             |            |                    |    | BYTE-BASED METHOD, PROCESS AND ALGORITHM FOR SERVICE-ORIENTED AND UTILITY INFRASTRUCTURE USAGE MEASUREMENT, METERING, AND PRICING                                           |
| 82004369     | Granted      | 3814194.9      | 4/16/2003   | 7/25/2007  | 3814194.9          | CN | Using Energy Recognition Techniques For Energy Management In Large Data Centers                                                                                             |
| 82201898     | Granted      | 200680043420.1 | 11/8/2006   | 3/20/2013  | 200680043420.1     | CN | Control Layer For A Nanoscale Electronic Switching Device                                                                                                                   |
| 82837228     | Granted      | 200980158474.6 | 3/27/2009   | 41710      | 200980158474.6     | CN | SWITCHABLE JUNCTION WITH INTRINSIC DIODE                                                                                                                                    |
| 82925131     | Published    |                | 3/12/2010   |            | 201080065394.9     | CN | DEVICE HAVING MEMRISTIVE MEMORY                                                                                                                                             |
| 83215484     | Application  |                | 9/27/2010   |            | 201080069812.1     | CN | DEVICE STRUCTURE FOR LONG ENDURANCE MEMRISTORS                                                                                                                              |
| 83858239     | Published    |                | 10/21/2011  |            | 201180074219       | CN | MEMRISTIVE ELEMENT BASED ON HETERO-JUNCTION OXIDE                                                                                                                           |
| 83959999     | Published    |                | 2/29/2012   |            | 201280065140.6     | CN | Memristor with Channel Region In Thermal Equilibrium with Containing Region                                                                                                 |
| 84078599     | Published    |                | 7/31/2012   |            | 201280072903.X     | CN | NON-VOLATILE RESISTIVE MEMORY CELLS                                                                                                                                         |
| 83863148     | Published    |                | 10/11/2011  |            | 201180074109.4     | CN | Authenticating a User's Location in a Femtocell-Based Network                                                                                                               |
| 84077623     | Published    |                | 7/31/2012   |            | 201280072859.2     | CN | IMPLEMENTING A TRANSITION PROTOCOL IN WHICH A FIRST RULE SET FOR ROUTING PACKETS RECEIVED BY A GROUP OF SWITCHES DURING A FIRST TIME PERIOD IS UPDATED TO A SECOND RULE SET |
| 84100826     | Published    |                | 5/11/2012   |            | 201280074616.2     | CN | SERVER SELECTION                                                                                                                                                            |

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| 84103199     | Published   |                  | 7/31/2012   |            | 201280074022.1     | CN | WIRELESS ACCESS POINT CELL ID INSERTION IN FRAME HEADER                                                                                                      |
| 84312639     | Application |                  | 1/18/2013   |            |                    | CN | PREVENTING A MEMORY ATTACK TO A WIRELESS ACCESS POINT                                                                                                        |
| 82207397     | Granted     | 200680020299     | 6/9/2006    | 3/17/2010  | 200680020299       | CN | OPTICALLY COUPLED INTEGRATED CIRCUIT LAYERS                                                                                                                  |
| 82242671     | Granted     | 200880128547.2   | 4/2/2008    | 9/26/2012  | 200880128547.2     | CN | PRISM BEAMSPLITTERS                                                                                                                                          |
| 82595680     | Granted     | 200880130511.8   | 7/25/2008   | 1/16/2013  | 200880130511.8     | CN | LIGHT-EMITTING DEVICES                                                                                                                                       |
| 82716713     | Granted     | ZL200880131795.2 | 10/31/2008  | 42186      | 200880131795.2     | CN | Optical Broadcast With Buses With Shared Optical Interfaces                                                                                                  |
| 82790052     | Published   |                  | 1/9/2009    |            | 200980157959.3     | CN | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                                                    |
| 82844161     | Published   |                  | 3/23/2009   |            | 200980158821.5     | CN | INDIRECT-BANDGAP-SEMICONDUCTOR, LIGHT-EMITTING DIODE                                                                                                         |
| 82926256     | Published   |                  | 9/25/2009   |            | 200980161152.7     | CN | SILICON-GERMANIUM, QUANTUM-WELL, LIGHT-EMITTING DIODE                                                                                                        |
| 83770210     | Published   |                  | 6/15/2011   |            | 201180072291.X     | CN | MICRO-RING RESONATOR                                                                                                                                         |
| 83791120     | Published   |                  | 7/29/2011   |            | 201180073223.5     | CN | FIBER OPTICS CONNECTORS                                                                                                                                      |
| 83821153     | Published   |                  | 8/31/2011   |            | 201180074348.X     | CN | Thermal Shunt                                                                                                                                                |
| 83948847     | Published   |                  | 1/18/2012   |            | 201280062622.6     | CN | INTEGRATED SUB-WAVELENGTH GRATING ELEMENT                                                                                                                    |
| 82274696     | Granted     | 3824110.2        | 8/11/2003   | 39806      | 3824110.2          | CN | Multi-level packet screening with dynamically selected filtering criteria                                                                                    |
| 84153335     | Published   |                  | 7/31/2012   |            | 201280075507.2     | CN | UNAUTHORIZED USER CLASSIFICATION                                                                                                                             |
| 83784107     | Published   |                  | 10/20/2011  |            | 201180073352.4     | CN | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS BASED ON A REFERENCE BASELINE ACCORDING TO TEMPORAL POSITION IN A SEQUENCE OF EVENTS                            |
| 84141264     | Published   |                  | 7/31/2012   |            | 201280075026.1     | CN | VULNERABILITY VECTOR INFORMATION ANALYSIS                                                                                                                    |
| 83730047     | Published   |                  | 7/30/2011   |            | 201180071504.7     | CN | SIDEWAYS INFORMATION PASSING                                                                                                                                 |
| 84079644     | Published   |                  | 6/4/2012    |            | 201280072902.5     | CN | MANAGING AN ANALYTIC FUNCTION TO BE PERFORMED ON DATA STORED IN AN INPUT BLOCK                                                                               |
| 83991652     | Published   |                  | 4/30/2012   |            | 201280068636.9     | CN | AUTOMATED EVENT MANAGEMENT                                                                                                                                   |
| 84279572     | Application |                  | 12/11/2012  |            | 201280078208.4     | CN | Provisioning Tools for Application Development                                                                                                               |
| 82183361     | Granted     | 200580024570.3   | 5/24/2005   | 6/16/2010  | 200580024570.3     | CN | Energy Efficient CRAC Unit Operation                                                                                                                         |
| 82197716     | Granted     | 200580023995.2   | 5/24/2005   | 4/13/2011  | 200580023995.2     | CN | Energy Efficient CRAC Unit Operation Using Heat Transfer Levels                                                                                              |
| 82210577     | Granted     | 200710084117.2   | 1/5/2007    | 10/5/2011  | 200710084117.2     | CN | Head Of Queue Cache For Communication Interfaces                                                                                                             |
| 82223504     | Granted     | ZL200880010559.5 | 3/21/2008   | 1/16/2013  | 200880010559.5     | CN | Three-dimensional Crossbar Array Systems And Methods For Writing Information To And Reading Information Stored In Three-dimensional Crossbar Array Junctions |
| 82232183     | Granted     | ZL200880102318.3 | 7/30/2008   | 9/25/2013  | 200880102318.3     | CN | Electronic System Having Free Space Optical Elements                                                                                                         |

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| 82238921     | Granted     | ZL200880128043.0 | 3/14/2008   | 415/70     | 200880128043       | CN | Exergy Based Evaluation Of An Infrastructure                                                                                               |
| 82239548     | Published   |                  | 11/27/2007  |            | 200780102257.6     | CN | SYSTEM SYNTHESIS TO MEET AN EXERGY LOSS TARGET VALUE                                                                                       |
| 82240172     | Granted     | 200880129470     | 4/1/2008    | 6/26/2013  | 200880129470       | CN | Management System Operable Under Multiple Metric Levels                                                                                    |
| 82242233     | Granted     | ZL200880126802.X | 3/3/2008    | 11/27/2013 | 200880126802.X     | CN | METHOD AND SYSTEM FOR DETECTION AND CORRECTION OF PHASED-BURST ERRORS, ERASURES, SYMBOL ERRORS, AND BIT ERRORS IN A RECEIVED SYMBOL STRING |
| 82242542     | Granted     | ZL200880129118.7 | 3/10/2008   | 12/3/2014  | 200880129118.7     | CN | Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same                                                  |
| 82573991     | Granted     | 200880130237.4   | 6/30/2008   | 7/3/2013   | 200880130237.4     | CN | Optimizing Fluid Flow Distribution In A Structure                                                                                          |
| 82728097     | Granted     | ZL200880132413.8 | 12/19/2008  | 42158      | 200880132413.8     | CN | Redundant Data Storage For Uniform Read Latency                                                                                            |
| 83134883     | Allowed     |                  | 6/16/2010   |            | 201080067447       | CN | Computer Racks                                                                                                                             |
| 83862773     | Published   |                  | 11/11/2011  |            | 201180074750.8     | CN | MANAGING AIRFLOW PROVISIONING                                                                                                              |
| 84077872     | Published   |                  | 7/10/2012   |            | 201280072828.7     | CN | LIST SORT STATIC RANDOM ACCESS MEMORY                                                                                                      |
| 84158934     | Published   |                  | 8/28/2012   |            | 201280075500       | CN | HIGH PERFORMANCE PERSISTENT MEMORY                                                                                                         |
| 84217946     | Published   |                  | 11/6/2012   |            | 201280076901.8     | CN | ENHANCED GRAPH TRAVERSAL                                                                                                                   |
| 84223024     | Published   |                  | 11/2/2012   |            | 201280078087.3     | CN | Selective Error Correcting Code and Memory Access Granularity Switching                                                                    |
| 84304435     | Application |                  | 1/30/2013   |            | 201380071875.4     | CN | RECOVERING PAGES OF A DATABASE                                                                                                             |
| 82891337     | Published   |                  | 6/23/2009   |            | 200980160061.1     | CN | Power Distribution To Computer System                                                                                                      |
| 83012848     | Published   |                  | 10/25/2010  |            | 201080069807       | CN | POWER CONVERTER                                                                                                                            |
| 83273477     | Published   |                  | 12/22/2010  |            | 201080070842.4     | CN | Mosfet Switch Gate Driver, Mosfet Switch System And Method                                                                                 |
| 83996149     | Published   |                  | 4/20/2012   |            | 201280068684.8     | CN | OVERVOLTAGE PROTECTION SYSTEMS AND METHOD                                                                                                  |
| 83995711     | Published   |                  | 2/9/2012    |            | 201280068668.9     | CN | HEAT DISSIPATING SYSTEM                                                                                                                    |
| 81953471     | Granted     | 69602484.5       | 3/22/1996   | 5/19/1999  | 96302014.4         | DE | Disk Data Recording Device                                                                                                                 |
| 81957098     | Granted     | 69621077         | 6/11/1996   | 5/8/2002   | 96109347.3         | DE | Method And Apparatus For Providing Topology Based Enterprise Management Services                                                           |
| 81968684     | Granted     | 102005029428     | 6/24/2005   | 8/8/2013   | 102005029428.6     | DE | System And Method For Managing Cache Access In A Distributed System                                                                        |
| 81976055     | Granted     | 10209803.4       | 3/6/2002    | 7/29/2004  | 10209803.4         | DE | Method And Apparatus For Providing File System Access To A Disk Array                                                                      |
| 81978692     | Granted     | 60210211.1       | 1/9/2002    | 38805      | 2250150.6          | DE | Redundant Backup Device                                                                                                                    |
| 81989315     | Published   |                  | 2/28/2002   |            | 10208771.7         | DE | Adaptive Synchronous DC Fan Speed Controller                                                                                               |
| 81994793     | Granted     | 60220350.3       | 8/22/2002   | 5/30/2007  | 2255883.7          | DE | Systems And Methods For Providing Automatic Access To Data Media In A Data Storage System                                                  |

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| 82001303     | Granted | 10306598.9    | 2/17/2003   | 10/25/2007 | 10306598.9         | DE | Method And System For Assessing Availability Of Components In Electronic Systems Including Computer Systems                 |
| 82004534     | Granted | 60307027.2    | 11/21/2003  | 7/26/2006  | 3257361            | DE | Media-detection Systems                                                                                                     |
| 82006841     | Granted | 10315490.6    | 4/4/2003    | 4/29/2010  | 10315490.6         | DE | A Method And System Of Switching Between Two Or More Images Of Firmware On A Host Device                                    |
| 82006859     | Granted | 60313729.6    | 7/23/2003   | 5/9/2007   | 3016822.3          | DE | Backplane System And Method For Its Use                                                                                     |
| 82012850     | Granted | 69614460.3    | 6/10/1996   | 8/16/2001  | 96109263.2         | DE | Computer Frame Structure With Modular Housing                                                                               |
| 82019711     | Granted | 69837461.4    | 7/31/1998   | 4/4/2007   | 98306134.2         | DE | Internet Enabled Computer System Management                                                                                 |
| 82020959     | Granted | 69735576.4    | 10/7/1997   | 3/29/2006  | 97307976.7         | DE | Method And Apparatus For Automatic Device Segmentation And Port-To-Segment Distribution                                     |
| 82025012     | Granted | 69838498.9    | 6/9/1998    | 10/3/2007  | 98304565.9         | DE | Automatic Internet Protocol (IP) Address Allocation And Assignment                                                          |
| 82028273     | Granted | 69938908.9    | 3/2/1999    | 6/18/2008  | 99301567.6         | DE | Servo Band Identification In Linear Tape Systems Having Timing-based Servo Formats                                          |
| 82037372     | Granted | 69929289.1    | 10/21/1999  | 1/4/2006   | 99308294           | DE | Mail Slot Data Cartridge Exchange System For Use With A Data Storage System                                                 |
| 82037948     | Granted | 69926476.6    | 12/20/1999  | 8/3/2005   | 99310273           | DE | Network Appliance Combining Asynchronous Notification With Interactive Network Transfer Protocol Server                     |
| 82041689     | Granted | 69833723.9    | 12/10/1998  | 3/8/2006   | 98123605.2         | DE | Network Management Event Storage And Manipulation Using Relational Database Technology In A Data Warehouse                  |
| 82043123     | Granted | 69926602.5    | 11/30/1999  | 8/10/2005  | 99123777.7         | DE | Hybrid Just-in-time Compiler That Consumes Minimal Resource                                                                 |
| 82044554     | Granted | 60000518.6    | 2/24/2000   | 10/2/2002  | 301478.4           | DE | Data Cartridge Exchange Apparatus                                                                                           |
| 82046540     | Granted | 69939460      | 11/18/1999  | 9/3/2008   | 99122965.9         | DE | An Adaptive Web Server                                                                                                      |
| 82047860     | Granted | 49906067.9    | 6/22/1999   | 10/19/1999 | 49906067.9         | DE | Bezel For Rack Mounted Device                                                                                               |
| 82049246     | Granted | 10100810.4    | 1/10/2001   | 11/20/2003 | 10100810.4         | DE | Media Handling Device Having Replaceable Modules                                                                            |
| 82060043     | Granted | 60010458.3    | 8/30/2000   | 5/6/2004   | 307436.6           | DE | Method, Computer System And Computer Program Product For Printing A Document Page                                           |
| 82062533     | Granted | 60110579.6    | 5/8/2001    | 5/4/2005   | 1925726            | DE | Charging For VAS Resource Usage In A Communications Infrastructure                                                          |
| 82062836     | Granted | 60135891      | 7/10/2001   | 9/24/2008  | 1305936.5          | DE | Location Data Diffusion And Location Discovery                                                                              |
| 82062860     | Granted | 60111481.7    | 11/30/2001  | 6/15/2005  | 1310044.1          | DE | Idiom Handling In Voice Service Systems                                                                                     |
| 82063649     | Granted | 60123969.5    | 8/17/2001   | 10/18/2006 | 1958228.7          | DE | A Computer System Operable To Revert To A Trusted State                                                                     |
| 82064207     | Granted | 60207500.9    | 9/10/2002   | 11/23/2005 | 2256245.8          | DE | Method And Apparatus For Identifying A Voice Caller                                                                         |
| 82064600     | Granted | 60214632.1    | 7/26/2002   | 9/13/2006  | 2255218.6          | DE | Multi-domain Authorisation And Authentication                                                                               |
| 82066271     | Granted | 10248006      | 10/15/2002  | 1/17/2008  | 10248006           | DE | A Method, Using Identity Based Encryption, To Permit A Sender Of A Message To Place Constraints On Who Can Read The Message |

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| 82066853     | Granted   | 69732741.8     | 1/17/1997   | 3/16/2005  | 97900685.5         | DE | Multicarrier Communication System And Method For Peer-to-Peer Power Control                                          |
| 82068077     | Granted   | 69802294.7     | 8/28/1998   | 10/31/2001 | 98940428           | DE | Data Backup And Recovery System                                                                                      |
| 82068167     | Granted   | 69926302.6     | 5/14/1999   | 7/27/2005  | 99303793.6         | DE | Calibrating WPE                                                                                                      |
| 82068479     | Granted   | 69816415.6     | 3/2/1998    | 7/16/2003  | 98301498.6         | DE | Enhancing Reliability                                                                                                |
| 82068530     | Granted   | 69910466.1     | 2/19/1999   | 8/20/2003  | 99301223.6         | DE | Dynamic Index                                                                                                        |
| 82069397     | Granted   | 60025439.9     | 4/19/2000   | 1/11/2006  | 303325.5           | DE | Loop Prevention In Networks                                                                                          |
| 82071329     | Granted   | 60205208.4     | 1/21/2002   | 7/27/2005  | 2354011.5          | DE | Method Of Brokering Network Services                                                                                 |
| 82071350     | Granted   | 60228044.3     | 1/18/2002   | 8/6/2008   | 2354007.3          | DE | Distributed Computing System And Method                                                                              |
| 82077317     | Granted   | 69726138.7     | 4/24/1997   | 11/12/2003 | 97922458.1         | DE | System, Method And Article Of Manufacture For Network Electronic Authorization Utilizing An Authorization Instrument |
| 82082570     | Granted   | 60329459.6     | 10/17/2003  | 9/30/2009  | 3023651.7          | DE | Media Storage System And Method For Identifying A Storage Location Therein                                           |
| 82084058     | Granted   | 10338002.7     | 8/19/2003   | 2/3/2011   | 10338002.7         | DE | Method And Apparatus For High Speed Bus Having Adjustable, Symmetrical, Edge-rate Controlled, Waveforms              |
| 82085207     | Granted   | 60310364.2     | 10/9/2003   | 12/13/2006 | 3022914            | DE | High-density Media Storage System                                                                                    |
| 82095944     | Granted   | 60327507.9     | 11/3/2003   | 5/6/2009   | 3256934.5          | DE | Method And Architecture To Provide Client Session Failover                                                           |
| 82097072     | Granted   | 602005020930.1 | 6/13/2005   | 4/28/2010  | 5754562.6          | DE | Method And System For Establishing Communications                                                                    |
| 82097570     | Granted   | 10325816.7     | 6/6/2003    | 9/4/2008   | 10325816.7         | DE | Public Key Infrastructure In Network Management                                                                      |
| 82098431     | Granted   | 112007002130   | 8/28/2007   | 9/11/2014  | 112007002130.6     | DE | Computer System Indicator Panel With Exposed Indicator Edge                                                          |
| 82099604     | Granted   | 602005014979.1 | 9/12/2005   | 6/17/2009  | 5300740.7          | DE | Context-based Event Processing                                                                                       |
| 82100432     | Published |                | 6/9/2004    |            | 102004028154.8     | DE | A Rack Equipment Environmental Condition Adjustment System And Method                                                |
| 82101545     | Granted   | 60322018.5     | 4/3/2003    | 7/9/2008   | 3290837.8          | DE | Methods And Apparatus For Controlling Processing Entities, Such As Distributed Signalling Gateways                   |
| 82102316     | Granted   | 60301718.5     | 10/17/2003  | 9/28/2005  | 3256580.6          | DE | System And Method Of Measuring Low Impedances                                                                        |
| 82103477     | Granted   | 102004012835.9 | 3/16/2004   | 2/11/2010  | 102004012835.9     | DE | Method Of Managing Utilization Of Network Intrusion Detection Systems In A Dynamic Data Center                       |
| 82116032     | Granted   | 69614009.8     | 1/23/1996   | 7/25/2001  | 96300437.9         | DE | REMOTE DUPLICATE DATABASE FACILITY WITH DATABASE REPLICATION SUPPORT FOR ONLINE DDL OPERATIONS                       |
| 82116086     | Granted   | 69615230.4     | 1/23/1996   | 9/19/2001  | 96300429.6         | DE | RELATIONAL DATABASE SYSTEM AND METHOD WITH HIGH DATA AVAILABILITY DURING TABLE DATA RESTRUCTURING                    |
| 82126973     | Granted   | 69721209.2     | 12/31/1997  | 4/23/2003  | 97310692.5         | DE | BUFFER RESERVATION METHOD FOR A BUS BRIDGE SYSTEM                                                                    |
| 82127447     | Granted   | 69621212.9     | 12/12/1996  | 5/15/2002  | 96309071.7         | DE | BUS ERROR HANDLER FOR PERR# & SERR# ON DUAL PCI BUS SYSTEM                                                           |

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| 82128830     | Granted   | 69731603.3     | 12/30/1997  | 11/17/2004 | 69731603.3         | DE | A NETWORK SWITCH WITH A MULTIPLE BUS STRUCTURE AND A BRIDGE INTERFACE FOR TRANSFERRING NETWORK DATA BETWEEN DIFFERENT BUSES |
| 82133594     | Granted   | 60016213.3     | 6/23/2000   | 11/24/2004 | 943160.2           | DE | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS                     |
| 82136267     | Granted   | 69811832.4     | 11/25/1998  | 3/5/2003   | 98309653.8         | DE | METHOD FOR ESTIMATING STATISTICS OF PROPERTIES OF INTERACTIONS PROCESSED BY A PROCESSOR PIPELINE                            |
| 82164119     | Granted   | 69518604.3     | 10/5/1995   | 8/30/2000  | 95307130.5         | DE | VARIABLE FREQUENCY CLOCK CONTROL FOR MICROPROCESSOR-BASED COMPUTER SYSTEMS                                                  |
| 82165232     | Granted   | 69626946.5     | 12/23/1996  | 3/26/2003  | 96120819.6         | DE | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                              |
| 82170161     | Granted   | 102004033828   | 7/13/2004   | 11/8/2012  | 102004033828       | DE | Method And Apparatus For Storing Data On Magnetic Tape                                                                      |
| 82171154     | Granted   | 602004010704.2 | 10/21/2004  | 12/12/2007 | 4796284            | DE | Methods And Systems For Dynamically Configuring A Network Component                                                         |
| 82173488     | Granted   | 602004018251.6 | 10/18/2004  | 12/10/2008 | 4105131.9          | DE | Tape Drive Permanent Emulation Of Cd--drive For Disaster Recovery                                                           |
| 82176485     | Published |                | 8/9/2004    |            | 102004038649.8     | DE | Persistent Memory Device For Backup Process Checkpoint States                                                               |
| 82178642     | Granted   | 602004019955.9 | 10/21/2004  | 3/11/2009  | 4796093.5          | DE | Controlling Power Supplied To A Circuit Using An Externally Applied Magnetic Field                                          |
| 82179539     | Granted   | 102005056892   | 11/29/2005  | 9/9/2010   | 102005056892       | DE | Electronic Module For System Board With Pass-thru Holes                                                                     |
| 82185473     | Granted   | 102004063573   | 12/30/2004  | 2/12/2009  | 102004063573       | DE | Providing A Flexible Protection Model In A Computer System By Decoupling Protection From Computer Privilege Level           |
| 82186205     | Granted   | 602005003668.7 | 5/13/2005   | 12/5/2007  | 5752784.8          | DE | Improvements In Message-based Communications                                                                                |
| 82187768     | Granted   | 602005012839.5 | 8/31/2005   | 2/18/2009  | 5784661            | DE | COMMUNICATIONS INFRASTRUCTURE FOR CONTENT DELIVERY USING EDGE SERVERS                                                       |
| 82189079     | Granted   | 602005021113.6 | 10/17/2005  | 5/5/2010   | 5300830.6          | DE | Communication System And Method                                                                                             |
| 82189409     | Published |                | 6/30/2005   |            | 102005030663.2     | DE | System And Method For Operating Load Balancers For Multiple Instance Applications                                           |
| 82191764     | Granted   | 602005010567   | 5/10/2005   | 10/22/2008 | 5748148.3          | DE | Architecture And Methods For Computing With Nanometer Scale Reconfigurable Resistor Crossbars Switches (as Amended)         |
| 82197395     | Granted   | 102005053727   | 11/10/2005  | 4/11/2013  | 102005053727.8     | DE | Distributed Lock                                                                                                            |
| 82199936     | Granted   | 602005017733.7 | 12/19/2005  | 11/18/2009 | 5027786.2          | DE | Data Retrieval From Computing Systems                                                                                       |
| 82200128     | Granted   | 602005022590   | 10/21/2005  | 7/28/2010  | 5300845.4          | DE | Distinguishing Between Network Entities Having The Same Address (as Amended)                                                |
| 82201808     | Granted   | 602005009139.4 | 3/29/2005   | 8/20/2008  | 5300226.7          | DE | Routing Element With Special Functions                                                                                      |
| 82201868     | Published |                | 6/9/2006    |            | 112006001454.4     | DE | Fiber-coupled Single Photon Source                                                                                          |

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| 82205864     | Granted   | 112005003037.7 | 10/31/2005  | 9/8/2011   | 112005003037.7     | DE | Determining Highest Workloads For Nodes In An Overlapped Network                               |
| 82205879     | Granted   | 112005003035   | 12/6/2005   | 9/15/2011  | 112005003035       | DE | Splitting A Workload Of A Node                                                                 |
| 82206302     | Granted   | 112006000650.9 | 3/9/2006    | 2/12/2009  | 112006000650.9     | DE | Embedded Web-based Management Method                                                           |
| 82209068     | Granted   | 602005008022.8 | 3/10/2005   | 7/9/2008   | 5720467.9          | DE | Server System, Server Device And Method Therefor                                               |
| 82209575     | Granted   | 112007002361   | 10/12/2007  | 8/14/2013  | 112007002361.9     | DE | Composite Material With Chirped Resonant Cells                                                 |
| 82211357     | Published |                | 7/18/2006   |            | 102006033185       | DE | Data Serializer                                                                                |
| 82211678     | Published |                | 10/9/2006   |            | 102006047656.5     | DE | Memory Controller                                                                              |
| 82211861     | Granted   | 602006012118   | 7/20/2006   | 2/3/2010   | 6787976.7          | DE | Service Chaining                                                                               |
| 82212863     | Granted   | 602007005468   | 4/25/2007   | 3/24/2010  | 7756009.2          | DE | Method And System For Scalable, Distributed, Differential Electronic-data Backup And Archiving |
| 82214111     | Granted   | 102007016060   | 4/3/2007    | 8/28/2014  | 102007016060.9     | DE | Computer Workload Redistribution                                                               |
| 82215131     | Granted   | 602006006445.4 | 7/31/2006   | 4/22/2009  | 6300840.3          | DE | Signalling Gateway                                                                             |
| 82215296     | Granted   | 102007048505   | 10/10/2007  | 7/11/2013  | 102007048505.2     | DE | Server Configured For Managing Power And Performance                                           |
| 82216118     | Granted   | 602007001125.6 | 1/30/2007   | 5/13/2009  | 7762845.1          | DE | Methods And Systems For Avoiding Transmission-channel Disruptions                              |
| 82224350     | Published |                | 1/10/2008   |            | 102008003905.5     | DE | SOFTWARE LICENSE AGREEMENT MANAGEMENT BASED ON TEMPORARY USAGE                                 |
| 82226600     | Granted   | 112008000994   | 4/25/2008   | 8/8/2013   | 112008000994.5     | DE | Active Control Of Time-varying Spatial Temperature Distribution                                |
| 82226993     | Published |                | 1/10/2008   |            | 112008000147.2     | DE | Capacitively Coupling Layers Of A Multilayer Device                                            |
| 82227035     | Published |                | 1/3/2008    |            | 112008000133.2     | DE | Photonic Systems And Methods For Encoding Data In Carrier Electromagnetic Waves                |
| 82227776     | Published |                | 3/21/2008   |            | 112008000703.9     | DE | Electromagnetic Radiation Amplification Systems Based On Photonic Gratings                     |
| 82229978     | Published |                | 5/21/2008   |            | 112008001727.1     | DE | END-TO-END FLOW CONTROL IN A NETWORK BACKGROUND                                                |
| 82230476     | Granted   | 112007003645.1 | 10/25/2007  | 6/16/2011  | 112007003645.1     | DE | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                        |
| 82230533     | Granted   | 112008001441   | 6/4/2008    | 11/27/2014 | 112008001441.8     | DE | OPTICAL INTERCONNECT                                                                           |
| 82233026     | Published |                | 9/19/2008   |            | 112008002888.5     | DE | Hardware Device Interface Supporting Transaction Authentication                                |
| 82233110     | Granted   | 112008001665   | 5/21/2008   | 12/13/2012 | 112008001665.8     | DE | Dynamic Converter Control For Efficient Operation                                              |
| 82233218     | Granted   | 601033888.6    | 4/3/2001    | 6/16/2004  | 1926566.9          | DE | USE OF A SINGLE THREAT TO SUPPORT MULTIPLE NETWORK CONNECTIONS FOR SERVER LOAD TESTING         |
| 82233296     | Published |                | 10/25/2007  |            | 112007003678.8-53  | DE | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                        |
| 82234163     | Granted   | 112008002429   | 9/8/2008    | 12/11/2014 | 112008002429.4     | DE | Hybrid Integrated Source Of Polarization-entangled Photons                                     |
| 82234541     | Published |                | 7/16/2008   |            | 112008001961.4     | DE | Free Space WDM Signal Detector                                                                 |

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| 82234607     | Published   |                | 10/15/2008  |            | 112008002736.6     | DE | METHOD AND SYSTEM OF TRACKING OPTICAL BEAM SH            |
| 82234670     | Granted     | 112008001351   | 6/25/2008   | 8/20/2015  | 112008001351.9     | DE | Nanowire Photodiodes And Methods Of Making Nanow         |
|              |             |                |             |            |                    |    | Photodiodes                                              |
| 82234979     | Granted     | 112008002059   | 7/30/2008   | 11/14/2013 | 112008002059       | DE | Microresonator Systems And Methods Of Fabricating Th     |
|              |             |                |             |            |                    |    | Same                                                     |
| 82235144     | Published   |                | 1/31/2008   |            | 112008003655.1     | DE | MODULAR DATA PROCESSING COMPONENTS AND SYSTEMS           |
|              |             |                |             |            |                    |    |                                                          |
| 82235165     | Granted     | 112008002737   | 10/15/2008  | 5/21/2015  | 112008002737.4     | DE | PLASMONIC HIGH-SPEED DEVICES FOR ENHANCING THE           |
|              |             |                |             |            |                    |    | PERFORMANCE OF MICROELECTRONIC DEVICES                   |
| 82235642     | Granted     | 112008003826   | 4/25/2008   | 8/20/2015  | 112008003826       | DE | DATA PROCESSING APPARATUS AND METHOD OF                  |
|              |             |                |             |            |                    |    | PROCESSING DATA                                          |
| 82235954     | Application |                | 2/20/2008   |            | 112008003746.9     | DE | Mounting Assembly For Rack Equipment                     |
| 82238330     | Published   |                | 1/31/2008   |            | 112008003660.8     | DE | OPTICAL TAPS FOR CIRCUIT BOARD-MOUNTED OPTICAL           |
|              |             |                |             |            |                    |    | WAVEGUIDES                                               |
| 82238540     | Published   |                | 1/30/2008   |            | 112008003659.4     | DE | NANOSTRUCTURES AND METHODS OF MAKING THE SAME            |
| 82238651     | Published   |                | 1/28/2008   |            | 112008003652.7     | DE | DEPLOYMENT OF BOOT IMAGES IN DISKLESS SERVERS            |
| 82239458     | Published   |                | 1/30/2008   |            | 112008003654.3     | DE | PLASMON ENHANCED LIGHT-EMITTING DIODES                   |
| 82241888     | Published   |                | 3/4/2008    |            | 112008003759.0     | DE | ANGLE SENSOR, SYSTEM AND METHOD EMPLOYING GUIDED-        |
|              |             |                |             |            |                    |    | MODE RESONANCE                                           |
| 82242215     | Granted     | 112008003784   | 3/28/2008   | 7/9/2015   | 112008003784.1     | DE | FLEXIBLE OPTICAL INTERCONNECT                            |
|              |             |                |             |            |                    |    |                                                          |
| 82242635     | Published   |                | 4/2/2008    |            | 112008003798.1     | DE | IMAGE-ROTATION PRISMS AND OPTICAL INTERCONNECTS          |
|              |             |                |             |            |                    |    | EMPLOYING THE SAME                                       |
| 82242653     | Granted     | 112008003796   | 4/4/2008    | 11/27/2014 | 112008003796.5     | DE | BEAMSPLITTERS WITH OFFSET COMPENSATION                   |
| 82242956     | Granted     | 102008047612.9 | 9/17/2008   | 7/22/2010  | 102008047612.9     | DE | Protected Portion Of Partition Memory For Computer Code  |
| 82245323     | Published   |                | 5/7/2008    |            | 112008003848.1     | DE | ARRAYS, SYSTEM AND METHOD FOR BI-DIRECTIONAL DATA        |
|              |             |                |             |            |                    |    | TRANSMISSION                                             |
| 82251566     | Granted     | 69624342.3     | 2/12/1996   | 10/16/2002 | 96906429.4         | DE | System And Method For Electronic Transfer Of Funds Using |
|              |             |                |             |            |                    |    | An Automated Teller Machine To Dispense The Transferred  |
|              |             |                |             |            |                    |    | Funds                                                    |
| 82252394     | Granted     | 69729722.5     | 2/24/1997   | 6/30/2004  | 97906748.5         | DE | Automated System For Selecting An Initial Computer       |
|              |             |                |             |            |                    |    | Reservation System                                       |
| 82252883     | Granted     | 69733266.7     | 10/29/1997  | 5/11/2005  | 97946866.7         | DE | Fail-safe Event Driven Transaction Processing System And |
|              |             |                |             |            |                    |    | Method                                                   |
| 82253642     | Granted     | 60214188.5     | 7/19/2002   | 8/23/2006  | 2752474.3          | DE | Method And System For Weld Process Monitoring            |
| 82254581     | Granted     | 60333657.4     | 9/30/2003   | 8/4/2010   | 3799309.4          | DE | DRIVE-BY-WIRELESS VEHICLE CONTROL                        |
| 82255022     | Granted     | 60306425.6     | 12/17/2003  | 6/21/2006  | 3814189.1          | DE | METHOD OF GUARANTEED DELIVERY OF SNMP TRAPS              |
|              |             |                |             |            |                    |    | ACROSS A WIDE AREA NETWORK                               |
| 82256270     | Granted     | 602005023293.1 | 4/21/2005   | 9/1/2010   | 5737577.6          | DE | INTERNET MICRO CELL                                      |
| 82256576     | Granted     | 602005008062.7 | 5/3/2005    | 7/9/2008   | 5761078.4          | DE | System And Method For Wireless Asset Tracking            |

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| 82266305     | Granted   | 69635190       | 7/24/1996   | 9/14/2005  | 96925499.4         | DE | METHOD AND APPARATUS FOR ASYNCHRONOUS PPP SYNCHRONOUS PPP CONVERSION                                                                       |
| 82267673     | Granted   | 69805849.6     | 12/11/1998  | 6/5/2002   | 98967000.5         | DE | A Forward Error Correction System For Packet Based Real Time Media                                                                         |
| 82269500     | Granted   | 60024237.4     | 3/15/2000   | 11/23/2005 | 914989.9           | DE | METHOD AND SYSTEM FOR NETWORK ADDRESS TRANSLATION WITH SAFETY FEATURES                                                                     |
| 82271174     | Granted   | 69941048.7     | 11/30/1999  | 7/1/2009   | 99965063.3         | DE | Telecommunication Conferencing System And Method                                                                                           |
| 82274240     | Granted   | 60317155.9     | 1/4/2003    | 10/31/2007 | 3000154.9          | DE | Network units for use in and organisation of cascade systems                                                                               |
| 82276985     | Granted   | 60318353       | 6/4/2003    | 1/2/2008   | 3253538.7          | DE | Propagation Of Viruses Through An Information Technology Network                                                                           |
| 82277792     | Granted   | 60214391.8     | 10/24/2002  | 8/30/2006  | 2354169.1          | DE | Event Detection For Multiple Voice Channel Communications                                                                                  |
| 82277807     | Granted   | 60231384.8     | 7/5/2002    | 3/4/2009   | 2354105.5          | DE | Improvements In Or Relating To DTMF Control                                                                                                |
| 82392130     | Granted   | 602005024894.3 | 7/11/2005   | 11/24/2010 | 5254326.1          | DE | Allocation Of Speech Recognition Tasks And Combination Of Results Thereof                                                                  |
| 82576658     | Granted   | 60334748.7     | 1/4/2003    | 10/27/2010 | 6023983.7          | DE | Network Units For Use In And Organisation Of Cascade Systems                                                                               |
| 82578770     | Granted   | 60223470       | 6/12/2002   | 11/14/2007 | 2254085            | DE | Node Controller for a Data Storage System                                                                                                  |
| 82579294     | Granted   | 602005020609.4 | 5/4/2005    | 4/14/2010  | 5746753.2          | DE | Pattern Discovery In A Network Security System                                                                                             |
| 82595682     | Published |                | 7/25/2008   |            | 112008003954.2-33  | DE | Light-emitting Devices                                                                                                                     |
| 82635092     | Granted   | 602007015649.1 | 4/20/2007   | 7/6/2011   | 7755826            | DE | Self-authenticating Quantum Random Bit Generators                                                                                          |
| 82660021     | Published |                | 10/7/2008   |            | 112008004025.7     | DE | Analyzing Events                                                                                                                           |
| 82672026     | Published |                | 10/29/2008  |            | 112008004061.3     | DE | Component Installation Guidance                                                                                                            |
| 82678696     | Granted   | 602007015650.5 | 4/20/2007   | 7/6/2011   | 7755829.4          | DE | Optical-based, Self-authenticating Quantum Random Number Generators                                                                        |
| 82729650     | Granted   | 69943407.6     | 11/15/1999  | 5/4/2011   | 99309055.4         | DE | Private Arbitrated Loop Self-test Management For A Fibre Channel Storage Enclosure                                                         |
| 82738930     | Granted   | 602008005935.9 | 10/14/2008  | 3/30/2011  | 8806753.3          | DE | Data Processing Arrangements For Use In Data Communication Apparatus In Connection With Error Correction                                   |
| 82743451     | Granted   | 60030761.1     | 7/10/2000   | 9/13/2006  | 947182.2           | DE | Electrically Addressable Volatile Non-volatile Molecular-based Switching Devices                                                           |
| 82743834     | Granted   | 602006023349.3 | 4/25/2006   | 7/27/2011  | 6751576.7          | DE | Three-dimensional Nanoscale Crossbars                                                                                                      |
| 82815953     | Granted   | 602005030748.6 | 8/5/2005    | 10/19/2011 | 5778416.7          | DE | System, Method And Apparatus To Obtain A Key For Encryption/decryption/data Recovery From An Enterprise Cryptography Key Management System |
| 82847506     | Granted   | 1859346        | 3/4/2005    | 1/11/2012  | 5733005.2          | DE | A Method And Apparatus For Facilitating Pipeline Throughput                                                                                |
| 82855472     | Granted   | 2301277        | 6/12/2009   | 10/12/2011 | 9761506.6          | DE | Improvements In Or Relating To Communications                                                                                              |

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| 82857868     | Published |                | 4/28/2009   |            | 112009004708.4     | DE | Network Interface                                                                                                                                  |
| 82862041     | Granted   | 2018734        | 4/18/2007   | 10/19/2011 | 7755664.3          | DE | Providing Different Network Services To A Network Agent                                                                                            |
| 82891339     | Granted   | 112009004869   | 6/23/2009   | 11/13/2014 | 112009004869.2     | DE | Power Distribution To Computer System                                                                                                              |
| 82892352     | Granted   | 112009004875   | 6/19/2009   | 8/13/2015  | 112009004875.7     | DE | Enclosure Power Controller                                                                                                                         |
| 82900682     | Granted   | 1324172        | 12/19/2002  | 2/8/2012   | 2258777.8          | DE | System And Method For Securing Fiber Channel Drive Access                                                                                          |
| 82900880     | Published |                | 7/31/2009   |            | 112009004987.7     | DE | In A Partitioned Data Library                                                                                                                      |
| 82901621     | Granted   | 602007019152.1 | 8/1/2007    | 11/30/2011 | 7836443.7          | DE | COMMISSIONING OF SENSORS                                                                                                                           |
| 82901715     | Published |                | 2/26/2010   |            | 112010005127.5     | DE | Cooling Fan Module                                                                                                                                 |
| 82903957     | Granted   | 602005033567.6 | 6/2/2005    | 4/11/2012  | 5104797.5          | DE | MIXED-FLOW DUCTED FAN                                                                                                                              |
| 82936592     | Published |                | 10/5/2009   |            | 112009005197.9     | DE | Non Unique Fragment Number Identifiers                                                                                                             |
| 82937584     | Granted   | 112010003170   | 3/24/2010   | 12/18/2014 | 112010003170.3     | DE | Adjusting A Transducer Head For Transferring Data                                                                                                  |
| 82938231     | Published |                | 4/22/2010   |            | 112010003227       | DE | Power Capping Feedback Normalization                                                                                                               |
| 82938254     | Granted   | 112009005129   | 12/28/2009  | 11/13/2014 | 112009005129.4     | DE | System And Method For Balancing Input Current With Parallel Power Supplies                                                                         |
| 82951110     | Granted   | 60200801688.3  | 11/13/2008  | 6/27/2012  | 8851440.1          | DE | A SYSTEM FOR PROVIDING PHYSICALLY SEPARATED COMPUTE AND I/O RESOURCES IN THE DATACENTER TO ENABLE SPACE AND POWER SAVINGS                          |
| 82997367     | Granted   | 2096672        | 1/26/2007   | 8/3/2011   | 9006878.4          | DE | Allocation Of Resources For Concurrent Query Execution Via Adaptive Segmentation                                                                   |
| 83009779     | Granted   | 60146607.1     | 3/26/2001   | 5/30/2012  | 1107514            | DE | MIXED-SCALE ELECTRONIC INTERFACE                                                                                                                   |
|              |           |                |             |            |                    |    | Method, Computer System, And Computer Program For Monitoring Objects Of An Information Technology Environment                                      |
| 83012850     | Published |                | 10/25/2010  |            | 112010005789.3     | DE | POWER CONVERTER                                                                                                                                    |
| 83050466     | Granted   | 836306         | 10/10/1996  | 7/4/2012   | 69638509           | DE | System Providing For Multiple Virtual Circuits Between Two Network Entities                                                                        |
| 83057026     | Granted   | 60244008.4     | 9/20/2002   | 11/7/2012  | 2768873.8          | DE | A System And Method For A Multi-node Environment With Shared Storage                                                                               |
| 83087137     | Granted   | 1805767        | 10/14/2005  | 12/5/2012  | 5810496.9          | DE | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
| 83092455     | Granted   | 60146955.1     | 4/9/2001    | 8/8/2012   | 1921066.5          | DE | Authentication And Encryption Method And Apparatus For A Wireless Local Access Network                                                             |
| 83092464     | Published |                | 12/16/2010  |            | 112010006008.8     | DE | A DETACHABLE LID                                                                                                                                   |
| 83111664     | Published |                | 6/22/2010   |            | 112010005609.9     | DE | STORING DATA IN ANY OF A PLURALITY OF BUFFERS IN A MEMORY CONTROLLER                                                                               |
| 83115117     | Granted   | 1825640        | 12/6/2004   | 9/5/2012   | 4805930.7          | DE | Interconnect System For Supply Chain Management Of Virtual Private Network Services                                                                |
| 83115128     | Granted   | 2008220        | 3/21/2007   | 9/5/2012   | 7759004            | DE | Service Management Framework                                                                                                                       |
| 83119182     | Published |                | 5/20/2010   |            | 112010005583.1     | DE | DATA CENTER COOLING                                                                                                                                |



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| 83136101     | Granted   | 2015553       | 7/10/2008   | 11/28/2012 | 8160071            | DE | Reverse Billing Of Messages Delivered To A Mobile Device                                                                                                  |
| 83136236     | Published |               | 6/7/2010    |            | 112010005657.9     | DE | MODULE AND PORT                                                                                                                                           |
| 83136244     | Published |               | 6/7/2010    |            | 112010005659.5     | DE | MODULE AND PORT                                                                                                                                           |
| 83137888     | Published |               | 7/12/2010   |            | 112010005636.6     | DE | FLEXIBLE DATA CENTER AND METHODS FOR DEPLOYMENT                                                                                                           |
| 83139207     | Granted   | 1484682       | 6/2/2003    | 12/5/2012  | 3291306.3          | DE | Method And Apparatus For Providing Support For An Electronic Device                                                                                       |
| 83140716     | Published |               | 10/26/2010  |            | 112010005914.4     | DE | BACKUP POWER SUPPLY SYSTEMS AND METHODS                                                                                                                   |
| 83139666     | Granted   | 2076836       | 10/25/2007  | 12/5/2012  | 7868580.7          | DE | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security                                          |
| 83185275     | Granted   | 69834845.1    | 12/17/1998  | 6/7/2006   | 98964021.4         | DE | Tape Leader Pin Assembly And Method For Making The Same                                                                                                   |
| 83213141     | Granted   | 2260364       | 4/2/2008    | 3/20/2013  | 8744891.6          | DE | Converting Resets In Shared I/O System                                                                                                                    |
| 83217121     | Granted   | 1394679       | 8/30/2002   | 5/29/2013  | 2354124.6          | DE | Improvements Relating To Technical Support Systems                                                                                                        |
| 83221477     | Granted   | 1650990       | 10/20/2004  | 4/17/2013  | 4300698            | DE | METHOD AND APPARATUS FOR ROUTING SHORT MESSAGES IN MOBILE TELEPHONE NETWORKS                                                                              |
| 83223392     | Granted   | 2212887       | 10/23/2008  | 4/17/2013  | 8842157.3          | DE | Three-dimensional Memory Module Architectures                                                                                                             |
| 83228576     | Granted   | 2271992       | 4/28/2008   | 4/3/2013   | 8743362.9          | DE | Method And System For Generating And Delivering Inter-processor Interrupts In A Multi-core Processor And In Certain Shared-memory Multi-processor Systems |
| 83247588     | Granted   | 69740590.7    | 12/8/1997   | 5/8/2013   | 97953075.5         | DE | PUBLIC KEY CRYPTOGRAPHIC APPARATUS AND METHOD                                                                                                             |
| 83266005     | Granted   | 2055073       | 7/10/2007   | 5/15/2013  | 7787333.9          | DE | Interface Module                                                                                                                                          |
| 83273479     | Published |               | 12/22/2010  |            | 112010006027.4     | DE | Mosfet Switch Gate Driver, Mosfet Switch System And Method                                                                                                |
| 83277111     | Granted   | 1929818       | 7/18/2006   | 6/5/2013   | 6787730.8          | DE | Automated Application Server (AS) Permissions Provisioning                                                                                                |
| 83439109     | Granted   | 1465472       | 10/24/2003  | 7/31/2013  | 3024381            | DE | Media Storage Systems And Control Panel For Use Therewith                                                                                                 |
| 83505404     | Granted   | 2313830       | 8/13/2008   | 10/2/2013  | 87953330.3         | DE | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                                      |
| 83543105     | Published |               | 4/27/2011   |            | 112011104984.6     | DE | Rotational Lockout                                                                                                                                        |
| 83683794     | Granted   | 2427994       | 10/26/2009  | 9/25/2013  | 9743889.9          | DE | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same                                                                   |
| 83693679     | Published |               | 6/30/2011   |            | 112011105326.6     | DE | A MEMORY MODULE THAT INCLUDES A MEMORY MODULE COPY ENGINE FOR COPYING DATA FROM AN ACTIVE MEMORY DIE TO A SPARE MEMORY DIE                                |
| 83694929     | Granted   | 2013708       | 4/20/2007   | 10/16/2013 | 7775953.8          | DE | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                                                       |
| 83721498     | Granted   | 2011042       | 4/25/2007   | 11/6/2013  | 7756008.4          | DE | Distributed Differential Store With Non-distributed Objects And Compression-enhancing Data-object Routing                                                 |

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|--------------|-----------|----------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 83748540     | Granted   | 1858266        | 5/18/2006   | 11/13/2013 | 6300494.9          | DE | Method And Gateway For Sending Subsystem Allowed And Subsystem Prohibited SCCP Management Messages For Distributed SCCP Application Servers |
| 83781699     | Granted   | 2311094        | 7/31/2008   | 1/1/2014   | 8794914.5          | DE | MULTI-LAYER RECONFIGURABLE SWITCHES                                                                                                         |
| 83785185     | Granted   | 602007034891.9 | 3/30/2007   | 1/22/2014  | 7300912.8          | DE | SIGNALING STATUS INFORMATION OF AN APPLICATION SERVICE                                                                                      |
| 83787163     | Granted   | 2288996        | 4/28/2008   | 1/29/2014  | 602008030187.7     | DE | Virtual-interrupt-mode Interface And Method For Virtual Interrupt Mode                                                                      |
| 83793383     | Published |                | 10/25/2011  |            | 112011105760.1     | DE | DRIVE CARRIER LIGHT SOURCE CONTROL                                                                                                          |
| 83800545     | Granted   | 2031822        | 12/12/2002  | 2/12/2014  | 8017098.8          | DE | System And Method For Managing Wireless Vehicular Communications                                                                            |
| 83815923     | Granted   | 2011012        | 4/25/2007   | 3/5/2014   | 602007035374.2     | DE | Content-based, Compression-enhancing Routing In Distributed, Differential Electronic-data Storage Systems                                   |
| 83854731     | Published |                | 10/27/2011  |            | 112011105774.1     | DE | SHIFTABLE MEMORY SUPPORTING IN-MEMORY DATA STRUCTURES                                                                                       |
| 83874027     | Granted   | 2248230        | 2/29/2008   | 4/16/2014  | 8731153.6          | DE | Modular System And Retractable Assembly For Electronic Devices                                                                              |
| 83874316     | Granted   | 2255291        | 2/18/2008   | 4/16/2014  | 8730074.5          | DE | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device                                             |
| 83874491     | Granted   | 1741139        | 4/25/2005   | 7/16/2014  | 5740296.8          | DE | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures                                                     |
| 83881516     | Granted   | 1920586        | 8/7/2006    | 4/9/2014   | 6800866.3          | DE | Screening Of Calls In A Packet-based Network                                                                                                |
| 83881930     | Published |                | 10/28/2011  |            | 112011105706.7     | DE | ROW SHIFTING SHIFTABLE MEMORY                                                                                                               |
| 83929725     | Granted   | 1986409        | 3/13/2008   | 5/7/2014   | 8004715.2          | DE | A Method, Apparatus And Software For Providing Communications Between A Packet Switched Network And A Public Switched Telephone Network     |
| 83933045     | Published |                | 12/23/2011  |            | 112011105886.1     | DE | MANAGING A FACILITY                                                                                                                         |
| 83984200     | Published |                | 1/6/2012    |            | 112012005120.3     | DE | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION                                  |
| 83985778     | Granted   | 2368268        | 12/23/2008  | 7/9/2014   | 8879253.6          | DE | Memristive Device And Methods Of Making And Using The Same                                                                                  |
| 83995642     | Published |                | 1/31/2012   |            | 112012005617.5     | DE | MEMORY MODULE BUFFER DATA STORAGE                                                                                                           |
| 83995688     | Published |                | 1/31/2012   |            | 112012005603.5     | DE | REDUCING CURRENT HARMONICS AT LIGHT LOADS                                                                                                   |
| 83996535     | Published |                | 4/27/2012   |            | 112012005628       | DE | Similarity Score Lookup and Representation                                                                                                  |
| 84016658     | Granted   | 1977572        | 1/23/2007   | 8/27/2014  | 7762485.6          | DE | Compute Clusters Employing Photonic Interconnections For Transmitting Optical Signals Between Compute Cluster Nodes                         |
| 84022795     | Granted   | 2374250        | 1/19/2009   | 10/29/2014 | 9838521.4          | DE | Load Balancing                                                                                                                              |

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| 84058057     | Granted     | 2460105       | 7/30/2009   | 10/1/2014  | 9847912.4          | DE | Constructing A Bayesian Network Based On Received Events Associated With Network Entities                       |
| 84081214     | Application |               | 7/31/2012   |            | 112012006768.1     | DE | Concept Categorization                                                                                          |
| 84084091     | Published   |               | 4/26/2012   |            | 112012006265.5     | DE | MULTICAST ROUTER TOPOLOGY DISCOVERY                                                                             |
| 84088599     | Published   |               | 4/23/2012   |            | 112012006119.5     | DE | STATISTICAL ANALYSIS USING A GRAPHICS PROCESSING UNIT                                                           |
| 84103204     | Published   |               | 7/31/2012   |            | 112012006763       | DE | WIRELESS ACCESS POINT CELL ID INSERTION IN FRAME HEADER                                                         |
| 84103238     | Published   |               | 7/31/2012   |            | 112012006642.1     | DE | BANDWIDTH GUARANTEE AND WORK CONSERVATION                                                                       |
| 84103276     | Published   |               | 7/31/2012   |            | 112012006766.5     | DE | VIRTUAL MACHINE DATA PACKET ENCAPSULATION AND DECAPSULATION                                                     |
| 84105774     | Granted     | 2480977       | 9/25/2009   | 11/5/2014  | 9849912.2          | DE | MAPPING NON-PREFETCHABLE STORAGE LOCATIONS INTO MEMORY MAPPED INPUT/OUTPUT SPACE                                |
| 84115805     | Granted     | 2486487       | 10/7/2009   | 12/3/2014  | 9850311.3          | DE | Notification Protocol Based Endpoint Caching Of Host Memory                                                     |
| 84122549     | Published   |               | 6/29/2012   |            | 112012006536       | DE | CAPACITY PLANNING SYSTEM                                                                                        |
| 84140169     | Published   |               | 10/25/2012  |            | 112012006649.9     | DE | EVENT CORRELATION                                                                                               |
| 84155341     | Granted     | 2497023       | 11/2/2009   | 2/25/2015  | 9850993.8          | DE | Multiprocessing Computing With Distributed Embedded Switching                                                   |
| 84172782     | Granted     | 2350842       | 10/30/2008  | 2/25/2015  | 8877865.9          | DE | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                                            |
| 84210219     | Published   |               | 10/18/2012  |            | 11 2012 006 928.5  | DE | COMMUNICATING TUPLES IN A MESSAGE                                                                               |
| 84211161     | Granted     | 2248029       | 2/26/2008   | 4/8/2015   | 8726109.5          | DE | Method And Apparatus For Performing A Host Enumeration Process                                                  |
| 84212968     | Granted     | 2080048       | 5/4/2009    | 3/4/2015   | 7839603.3          | DE | Photonic-interconnect Systems For Reading Data From Memory Cells And Writing Data To Memory Integrated Circuits |
| 84223072     | Application |               | 6/11/2015   |            | 102015210734.5     | DE | MANAGEMENT OF CRYPTOGRAPHIC KEYS                                                                                |
| 84251696     | Granted     | 2143259       | 1/29/2008   | 5/27/2015  | 8708351.5          | DE | Method And System For Facilitating Multi-point Communications                                                   |
| 84290589     | Granted     | 2622487       | 9/28/2011   | 7/15/2015  | 11833057           | DE | HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION                                                          |
| 90037714     | Granted     | 2176773       | 7/7/2008    | 9/2/2015   | 8808136.9          | DE | Data Packet Processing Method For A Multi Core Processor                                                        |
| 90063371     | Application |               | 9/30/2008   |            | 8824049.4          | DE | Authentication Of Services On A Partition                                                                       |
| 90064662     | Granted     | 2465030       | 8/11/2009   | 10/7/2015  | 9848324.1          | DE | Enclosure Airflow Controller                                                                                    |
| 82859768     | Published   |               | 4/27/2009   |            | 112009004565.0     | DE | Electric Power Conversion System Having An Adaptable Transformer Turns Ratio For Improved Efficiency            |
| 82912586     | Published   |               | 6/25/2009   |            | 112009005003.4     | DE | Systems And Methods For Delivering Power                                                                        |
| 83166374     | Granted     | 112010005872  | 9/13/2010   | 12/11/2014 | 112010005872.5     | DE | POWER RAIL REGULATOR SYSTEM                                                                                     |
| 83996153     | Published   |               | 4/20/2012   |            | 112012006250.7     | DE | OVERVOLTAGE PROTECTION SYSTEMS AND METHOD                                                                       |

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| 82231832     | Granted   | 112008001875   | 5/21/2008   | 8/1/2013   | 112008001875.8     | DE | A Modular High-density Computer System                                                                                                              |
| 83629029     | Published |                | 6/27/2011   |            | 112011105205.7     | DE | COOLING A SECONDARY COMPONENT BY DIVERTING AIRFLOW USING AN AIR CHANNEL ASSOCIATED WITH A THERMAL DISSIPATION DEVICE THAT COOLS A PRIMARY COMPONENT |
| 82176578     | Granted   | 112004002834   | 4/23/2004   | 41249      | 112004002834.5     | DE | Diagnostic Apparatus And Method                                                                                                                     |
| 82234637     | Published |                | 6/30/2008   |            | 102008030875.7     | DE | Datcenter Workload Evaluation                                                                                                                       |
| 83159856     | Published |                | 9/15/2010   |            | 112010005798.2     | DE | COMPUTER SYSTEM WITH FABRIC MODULES                                                                                                                 |
| 82180946     | Granted   | 102005047992.8 | 10/6/2005   | 10/8/2009  | 102005047992.8     | DE | Systems And Methods Of Balancing Crossbar Bandwidth                                                                                                 |
| 82126883     | Granted   | 69631106.2     | 10/4/1996   | 37972      | 96307279.8         | DE | ON-LINE DISK ARRAY RECONFIGURATION                                                                                                                  |
| 82194995     | Published |                | 5/13/2005   |            | 112005001050.3     | DE | Providing An Alternative Caching Scheme At The Storage Area Network Level                                                                           |
| 83853746     | Published |                | 10/25/2011  |            | 112011105660.5     | DE | DRIVE CARRIER TOUCH SENSING                                                                                                                         |
| 82128254     | Granted   | 69732268.8     | 6/4/1997    | 1/19/2005  | 97303808.6         | DE | AUTOMATICALLY PREFETCHING DATA IN A COMP-                                                                                                           |
| 82275404     | Granted   | 69801477.4     | 3/4/1998    | 8/29/2001  | 98910176.1         | DE | System And method For Determining End To End Characteristics Of A Data Communications Channel                                                       |
| 82268351     | Granted   | 69940341.3     | 4/7/1999    | 1/21/2009  | 99915315.8         | DE | Point-To-Point Protocol With A Signaling Channel                                                                                                    |
| 82721360     | Granted   | 69842202.3     | 5/28/1998   | 3/30/2011  | 98923848           | DE | Method And Apparatus For Providing Security In A Star Network Connection Using Public Key Cryptography                                              |
| 83242870     | Granted   | EP2077029      | 9/18/2007   | 5/1/2013   | 7842678            | DE | IDENTIFYING A SUBNET ADDRESS RANGE FROM DNS INFORMATION                                                                                             |
| 82037354     | Granted   | 60013037.1     | 5/23/2000   | 8/18/2004  | 111113.7           | DE | Laterally Expandable Modular Data Storage System                                                                                                    |
| 82067759     | Granted   | 69831790.4     | 5/12/1998   | 10/5/2005  | 98303691.4         | DE | Read After Write                                                                                                                                    |
| 82068317     | Granted   | 69802969       | 4/1/1998    | 12/12/2001 | 98913957.1         | DE | AFN Append Point                                                                                                                                    |
| 82644403     | Granted   | 60335237.5     | 10/9/2003   | 12/8/2010  | 3022910.8          | DE | Apparatus For Sensing The Presence Of An Inductive Load Driven By A Pulse Width Modulated Signal                                                    |
| 83261201     | Granted   | 913823         | 10/30/1998  | 5/22/2013  | 98308892.3         | DE | Data encoding method and apparatus                                                                                                                  |
| 82251992     | Granted   | 69934894.3     | 7/15/1999   | 39099      | 99934061.5         | DE | System And Method For Selectively Defining Access To Application Features                                                                           |
| 82173392     | Published |                | 4/19/2006   |            | 102006018232.4     | DE | Quality Of Service In IT Infrastructures                                                                                                            |
| 82060082     | Granted   | 60106467.4     | 12/14/2001  | 10/13/2004 | 1129865            | DE | Method, System And Computer Program For Monitoring Objects In An It Network                                                                         |
| 82182506     | Granted   | 102005053688.3 | 11/10/2005  | 10/23/2008 | 102005053688.3     | DE | Method And Mechanism For Identifying An Unmanaged Switch In A Network                                                                               |
| 82219844     | Granted   | 602006008412.9 | 12/29/2006  | 8/12/2009  | 6027116            | DE | Determining Data Link (L2) Network Paths                                                                                                            |
| 82182011     | Granted   | 602004006947.7 | 11/8/2004   | 6/13/2007  | 4256917.8          | DE | Non-platform-specific Unique Identifier Generation                                                                                                  |
| 82062512     | Granted   | 60121569.9     | 5/8/2001    | 7/19/2006  | 1925734.4          | DE | Operating A Ommunications Infrastructure On A Pre-payment Basis                                                                                     |
| 82070945     | Granted   | 60139485.2     | 10/31/2001  | 8/5/2009   | 1410142.2          | DE | Data Processing System And Method                                                                                                                   |
| 82071065     | Granted   | 60129022.4     | 10/30/2001  | 6/20/2007  | 1410140.6          | DE | Communication System And Method                                                                                                                     |

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| 82212596     | Granted     | 602006019223.1 | 6/30/2006   | 12/29/2010 | 6300735.5          | DE | SIGNALING SYSTEM AND METHOD                                                                              |
| 82230893     | Granted     | 602008002011.8 | 4/11/2008   | 8/4/2010   | 8103499.3          | DE | REDUCING A NUMBER OF REGISTRATION TERMINATION MESSAGES IN A NETWORK FOR CELLULAR DEVICES                 |
| 82910731     | Granted     | 2039121        | 7/10/2007   | 12/21/2011 | 7787337            | DE | METHOD OF PROVIDING SERVICES IN A NETWORK, NETWORK ELEMENT                                               |
| 83013559     | Granted     | 1885138        | 7/11/2006   | 41066      | 6300790            | DE | Signaling Gateway                                                                                        |
| 84191607     | Application | 2166703        | 9/21/2009   |            | 9170876.8          | DE | Method And System For Managing A Hierarchical Information Base With An Application Layer Protocol        |
| 84196124     | Granted     | 2597899        | 10/13/2011  | 4/1/2015   | 11306325.9         | DE | Optimizing telephony numbers for Machine 2 Machine Communications using Round Robin Assignment Technique |
| 82098347     | Granted     | 102004012056   | 3/11/2004   | 4/26/2012  | 102004012056       | DE | Systems And Methods For Monitoring Resource Utilization And Application Performance                      |
| 82116140     | Granted     | 69613722.4     | 1/15/1996   | 7/11/2001  | 96300261.3         | DE | METHOD AND APPARATUS FOR PREVENTING INADVERTENT CHANGES TO SYSTEM-CRITICAL FILES IN A COMPUTING SYSTEM   |
| 82208789     | Granted     | 602006012567.4 | 3/20/2006   | 3/3/2010   | 6111395.7          | DE | Method And Apparatus For Direct Input And Output In A Virtual Machine Environment                        |
| 82255862     | Granted     | 602004006312.6 | 10/29/2004  | 5/2/2007   | 4796875.5          | DE | METHOD AND SYSTEM FOR DETECTING A BOUNDARY CROSSING FOR EMBEDDED DEVICES IN VEHICLE                      |
| 82190936     | Granted     | 102005023128.4 | 5/19/2005   | 3/5/2009   | 102005023128.4     | DE | System And Method For Sharing Storage Resources Between Multiple Files                                   |
| 84080916     | Application |                | 7/30/2012   |            | 112012006749.5     | DE | SEARCH METHOD                                                                                            |
| 82105841     | Granted     | 602004001273.4 | 4/21/2004   | 6/21/2006  | 4252330.8          | DE | Cryptographic Method And Apparatus                                                                       |
| 82107155     | Granted     | 602004008877.3 | 1/27/2004   | 9/12/2007  | 4785812.1          | DE | Controlled Input Molecular Crossbar Latch                                                                |
| 82214726     | Granted     | 602007005156.8 | 10/16/2007  | 3/3/2010   | 7852786.8          | DE | CROSSBAR-MEMORY SYSTEMS WITH NANOWIRE CROSSBAR JUNCTIONS                                                 |
| 82218842     | Granted     | 602007005098.7 | 1/26/2007   | 3/3/2010   | 7709841.6          | DE | Mixed-scale Electronic Interface                                                                         |
| 82223525     | Published   |                | 4/18/2008   |            | 112008000988       | DE | Computational Nodes And Computational-node Networks That Include Dynamical-nanodevice Connections        |
| 90031087     | Granted     | 2686883        | 3/29/2011   | 7/1/2015   | 11862142.4         | DE | DUAL-PLANE MEMORY ARRAY                                                                                  |
| 82080059     | Granted     | 60308144.4     | 1/15/2003   | 9/6/2006   | 3707402.8          | DE | A Method For Searching Nodes For Information                                                             |
| 82198430     | Granted     | 602005013999   | 11/18/2005  | 4/15/2009  | 5851812.7          | DE | Composite Material With Controllable Resonant Cells                                                      |
| 82207415     | Granted     | 602006009536.8 | 7/21/2006   | 9/30/2009  | 6788057.5          | DE | Method And Apparatus For Electromagnetic Resonance Using Negative Index Material                         |
| 82235009     | Granted     | 112008002822   | 10/23/2008  | 9/22/2015  | 112008002822.2     | DE | Three-dimensional Die Stacks With Inter-device And Intra-device Optical Interconnect                     |
| 82238135     | Granted     | 112008003647   | 1/30/2008   | 5/21/2015  | 112008003647       | DE | OPTICAL INTERCONNECTS                                                                                    |
| 82245005     | Published   |                | 5/6/2008    |            | 112008003845.7     | DE | SYSTEM AND METHOD FOR MICRO RING LASER                                                                   |

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| 82595664     | Published |                | 7/14/2008   |            | 112008003936.4     | DE | HYBRID GUIDED-MODE RESONANCE FILTER AND METHOD EMPLOYING DISTRIBUTED BRAGG REFLECTION                                                                        |
| 83087121     | Granted   | 2047319        | 7/11/2007   | 11/7/2012  | 7796825.3          | DE | Compact Systems For Generating Polarization-entangled Photons                                                                                                |
| 83988221     | Granted   | 2321934        | 10/28/2009  | 6/25/2014  | 9752028.2          | DE | Distributed Packet Flow Inspection and Processing                                                                                                            |
| 82190687     | Granted   | 102005032734   | 7/13/2005   | 6/6/2013   | 102005032734.6     | DE | Index Extraction From Documents                                                                                                                              |
| 82245629     | Published |                | 4/30/2008   |            | 112008003832.5     | DE | Intentionally Skewed Optical Clock Signal Distribution                                                                                                       |
| 83087144     | Granted   | 2215539        | 11/27/2007  | 1/2/2013   | 7871581            | DE | SYSTEM SYNTHESIS TO MEET AN EXERGY LOSS TARGET VALUE                                                                                                         |
| 83808774     | Granted   | 2245516        | 12/21/2007  | 2/12/2014  | 7869793.5          | DE | Moisture Content Control System                                                                                                                              |
| 82004384     | Granted   | 60319688.8     | 4/16/2003   | 3/12/2008  | 3724032.2          | DE | Atmospheric Control Within A Building                                                                                                                        |
| 82084478     | Granted   | 602004006569.2 | 3/3/2004    | 5/23/2007  | 4004995.9          | DE | Method And Apparatus For Managing Device Reservation (as Amended)                                                                                            |
| 82088099     | Granted   | 60326440.9     | 12/29/2003  | 3/4/2009   | 3029948.1          | DE | Cartridge-handling Apparatus For A Media Storage System                                                                                                      |
| 82072304     | Granted   | 10008674.8     | 2/24/2000   | 5/24/2006  | 10008674.8         | DE | Electronic Apparatus Having Improved Diagnostic Interface                                                                                                    |
| 83618372     | Published |                | 5/25/2011   |            | 112011105140.9     | DE | BLADE COMPUTER SYSTEM                                                                                                                                        |
| 83787626     | Granted   | 2460074        | 7/31/2009   | 12/31/2014 | 9847921.5          | DE | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                                                           |
| 82103645     | Granted   | 602004019326.7 | 6/28/2004   | 2/4/2009   | 4015147.4          | DE | Method And Apparatus For Reducing Soft Errors                                                                                                                |
| 82127624     | Granted   | 69721381.1     | 6/4/1997    | 5/2/2003   | 97303797.1         | DE | EXPANSION CARD INSERTION AND REMOVAL                                                                                                                         |
| 83092488     | Granted   | 112010005672   | 6/18/2010   | 2/12/2015  | 112010005672.2     | DE | Systems And Methods For Determining Electrical Connectivity                                                                                                  |
| 82258040     | Published |                | 2/20/2009   |            | 112009000411.3     | DE | Method And System For Implementing A Virtual Storage Pool In A Virtual Environment                                                                           |
| 82786343     | Granted   | 69842332.1     | 3/30/1998   | 7/13/2011  | 98302442.3         | DE | APPARATUS AND METHOD FOR STORAGE SUBSYSTEM DRIVE MOVEMENT AND VOLUME ADDITION                                                                                |
| 83538876     | Granted   | 2255263        | 2/20/2008   | 7/31/2013  | 8730240.2          | DE | Redriver With Two Reference Clocks And Method Of Operation Thereof                                                                                           |
| 83928530     | Granted   | 2359534        | 12/15/2008  | 5/7/2014   | 8879013.4          | DE | Detecting An Unreliable Link In A Computer System                                                                                                            |
| 82036907     | Granted   | 69928603.4     | 4/8/1999    | 11/30/2005 | 99302754.9         | DE | Link Control State Machine For Controlling A Media Access Controller, A Serial Physical Layer Device And A Media Independent Interface Physical Layer Device |
| 82275209     | Granted   | 69629660.8     | 9/6/1996    | 8/27/2003  | 69629660.8         | DE | Transparent Support Of Protocol And Data Compression Features For Data Communication                                                                         |
| 82233317     | Granted   | 112007003693   | 10/25/2007  | 5/15/2014  | 112007003693.1     | DE | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                                                      |
| 81978719     | Granted   | 60131348.8     | 4/5/2001    | 11/14/2007 | 1108610.5          | DE | Device Detection System And Method                                                                                                                           |
| 82715606     | Granted   | 602004031978.3 | 11/5/2004   | 3/23/2011  | 4800797.5          | DE | PREVENTING IDENTITY THEFT IN ELECTRONIC COMMUNICATIONS                                                                                                       |

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| 82170953     | Granted   | 10341692.7     | 9/8/2003    | 1/11/2007  | 10341692.7         | DE | Object Copy And Object Mirror                                                                       |
| 84067465     | Granted   | 2324440        | 8/7/2008    | 10/8/2014  | 8797322.8          | DE | Providing Data Structures For Determining Whether Key of                                            |
| 83120019     | Granted   | 2361465        | 10/15/2008  | 8/29/2012  | 8875183.9          | DE | An Index Are Present In A Storage System                                                            |
| 84119241     | Granted   | 1748621        | 7/5/2006    | 12/31/2014 | 6253519            | DE | Retrieving Configuration Records From A Configuration Management Database                           |
| 82070621     | Granted   | 60039975.3     | 6/19/2000   | 8/20/2008  | 60039975.3         | DE | Computer System Polling                                                                             |
| 82100462     | Granted   | 60216772.8     | 10/22/2002  | 12/13/2006 | 2354168.3          | DE | Process For Controlling Devices Of An Intranet Network Through The Web                              |
| 82186748     | Granted   | 60330350.1     | 10/30/2003  | 12/2/2009  | 3292712.1          | DE | Method And Apparatus For Operating A Telecommunication Platform                                     |
| 82211903     | Granted   | 602006002122.4 | 4/3/2006    | 8/6/2008   | 6749186            | DE | Communication Method And Apparatus                                                                  |
| 82654152     | Granted   | 602006022697.7 | 7/20/2006   | 6/22/2011  | 6787972.6          | DE | Multimedia Transfer For Wireless Networks                                                           |
| 82675314     | Granted   | 602004033546   | 5/18/2004   | 9/14/2011  | 4733568.2          | DE | Telephony And Web Services Coordination                                                             |
| 82683515     | Granted   | 60144865       | 7/6/2001    | 6/29/2011  | 1410085.3          | DE | Method And Apparatus For Load-balancing.                                                            |
| 82991031     | Granted   | 1725065        | 5/11/2006   | 5/23/2012  | 6113818.6          | DE | Multi-service Telecommunications System And Associated Methods                                      |
| 83538246     | Granted   | 1592217        |             | 10/16/2013 | 602004043575.9     | DE | Controlling Access To Communication Services                                                        |
| 83809804     | Granted   | 1676420        | 7/6/2004    | 3/5/2014   | 4766134.3          | DE | Method And Apparatus For Providing A Specialized Resource Function In A Telephone Network           |
| 84118594     | Granted   | 2277311        | 5/20/2009   | 2/25/2015  | 9751488.9          | DE | Improvements In Or Relating To Fault Tolerant Systems                                               |
| 81967736     | Granted   | 60105326.5     | 1/11/2001   | 9/8/2004   | 1300224.1          | DE | Apparatus And Method For Recording Video Data                                                       |
| 82103708     | Published |                | 10/9/2003   |            | 10346923           | DE | Lightweight Public Key Infrastructure Employing Disposable Certificates                             |
| 82004195     | Granted   | 40111120.2     | 12/19/2001  | 9/6/2002   | 40111120.2         | DE | A Method For Protecting Security Of Intrusion Detection Sensors                                     |
| 82277960     | Granted   | 60314636.8     | 10/21/2003  | 6/27/2007  | 3292628.9          | DE | Electrical Contact                                                                                  |
| 82257104     | Granted   | 602007006944   | 4/27/2007   | 6/2/2010   | 7761477.4          | DE | Methods Relating To The Monitoring Of Computer Systems                                              |
| 82042217     | Granted   | 60020907.5     | 4/18/2000   | 6/22/2005  | 303272.9           | DE | In-transit Two-way Route Communication Between A Handheld Positioning Device And A Service Provider |
| 82253486     | Granted   | 60230304.4     | 10/15/2002  | 12/10/2008 | 2793789.5          | DE | Modular Data Storage System Utilizing A Wireless Cartridge Access Device                            |
| 82392461     | Granted   | 60238204.1     | 9/18/2002   | 11/3/2010  | 2775864.8          | DE | Method And System For Communicating Telematics Messages                                             |
| 83996453     | Published |                | 4/30/2012   |            | 112012005609.4     | DE | Monitoring In Component-based Systems At Runtime (as Amended)                                       |
| 84079676     | Published |                | 7/30/2012   |            | 112012006753.3     | DE | CONTROL SIGNAL BASED ON A COMMAND TAPPED BY A USER                                                  |
| 82065194     | Granted   | 60101142.2     | 3/2/2001    | 11/5/2003  | 1301921.1          | DE | GENERATING AND PARTITIONING POLYNOMIALS                                                             |
| 82208222     | Granted   | 602006001680.8 | 4/27/2006   | 7/9/2008   | 6113237.9          | DE | Beacon Based Web Services II                                                                        |
|              |           |                |             |            |                    |    | Network Management And Administration                                                               |

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| 82277207     | Granted   | 60326027.6     | 7/1/2003    | 1/28/2009  | 3254190.6          | DE | Authentication Method And Apparatus Using Pairing Functions For The Elliptic Curves Based Cryptosystems |
| 82184183     | Granted   | 602005007722.7 | 1/28/2005   | 6/25/2008  | 5712551            | DE | Split-stream Multi-access Point Data Transmission (as Amended)                                          |
| 82226330     | Granted   | 112007002328   | 10/3/2007   | 12/1/2011  | 112007002328.7     | DE | Electrically Actuated Switch                                                                            |
| 82991744     | Granted   | 1872370        | 4/19/2006   | 7/11/2012  | 6758437.5          | DE | Multiplexer Interface To A Nanoscale-crossbar                                                           |
| 83253501     | Granted   | 2361438        | 10/29/2008  | 5/15/2013  | 8877855            | DE | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein                 |
| 82172573     | Granted   | 602005016661   | 4/28/2005   | 9/16/2009  | 5738071.9          | DE | Assigning Wan Links To Subflows Based On Wan Link Characteristics And Application Preferences           |
| 82226636     | Published |                | 1/31/2008   |            | 112008000304.1     | DE | Electronic And Optical Circuit Integration Through Wafer Bonding                                        |
| 82230320     | Granted   | 112008001648   | 6/25/2008   | 10/24/2013 | 112008001648.8     | DE | Micro-electro-mechanical Systems And Photonic Interconnects Employing The Same                          |
| 82230512     | Published |                | 7/30/2008   |            | 112008001951.7     | DE | Optical Interconnect                                                                                    |
| 82230569     | Published |                | 7/16/2008   |            | 112008001649.4     | DE | Optical Device Including Waveguide Grating Structure                                                    |
| 82232507     | Published |                | 7/30/2008   |            | 112008002076       | DE | System And Methods For Routing Optical Signals                                                          |
| 82233446     | Published |                | 10/15/2008  |            | 112008002756       | DE | OPTICAL INTERCONNECT SYSTEM PROVIDING COMMUNICATION BETWEEN COMPUTER SYSTEM COMPONENTS                  |
| 82235258     | Published |                | 7/16/2008   |            | 112008002003.5     | DE | Plasmon-enhanced Electromagnetic-radiation-emitting Devices And Methods For Fabricating The Same        |
| 82239497     | Published |                | 1/31/2008   |            | 112008003653.5     | DE | FREE SPACE OPTICAL INTERCONNECT                                                                         |
| 82243745     | Published |                | 5/5/2008    |            | 112008003839.2     | DE | NANOWIRE-BASED PHOTODIODE                                                                               |
| 82405545     | Published |                | 5/9/2008    |            | 112008003858.9-51  | DE | Proximity Free Space Optical Interconnect                                                               |
| 82576820     | Published |                | 6/9/2008    |            | 112008003901.1     | DE | Cylindrical Resonators For Optical Signal Routing                                                       |
| 84038205     | Granted   | 602009026774.4 | 1/9/2009    | 9/17/2014  | 9837743.5          | DE | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                               |
| 82729655     | Granted   | 60338205.3     | 11/7/2003   | 8/24/2011  | 3783255.7          | DE | Active Network Defense System and Method                                                                |
| 82802868     | Granted   | 60337893.5     | 10/11/2003  | 8/3/2011   | 3256431.2          | DE | Propagation Of Viruses Through An Information Technology Network                                        |
| 82216589     | Published |                | 6/12/2007   |            | 112007001135.1     | DE | Sharing Data Between Partitions In A Partitionable System                                               |
| 83881892     | Published |                | 10/27/2011  |            | 112011105670.2     | DE | SHIFTABLE MEMORY EMPLOYING RING REGISTERS                                                               |
| 83884016     | Granted   | 1625501        | 5/13/2004   | 4/16/2014  | 4785554.9          | DE | Read, Write, And Recovery Operations For Replicated Data                                                |
| 84210536     | Granted   | EP1909178      | 6/6/2007    | 4/8/2015   | 7252277.4          | DE | Transactional Shared Memory System And Method Of Control                                                |
| 82938279     | Published |                | 3/22/2010   |            | 112010003211.4     | DE | MODULAR DATA CENTER                                                                                     |
| 82810951     | Granted   | 60240930.6     | 1/3/2002    | 8/31/2011  | 2250028.4          | DE | A Method For Sensing Humidity In A Tape Library                                                         |
| 83087109     | Granted   | 942427         | 2/24/1999   | 6/27/2012  | 99301353.1         | DE | EOD IN MIC                                                                                              |
| 83240731     | Granted   | 69843017.4     | 10/30/1998  | 5/1/2013   | 98308912.9         | DE | Data Encoding Scheme                                                                                    |



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| 82055816     | Granted     | 10125039.8     | 5/22/2001   | 10/6/2005  | 10125039.8         | DE | Imaging Device Testing With Thermographic Sheet Material                                            |
| 82164764     | Granted     | 69633808.4     | 3/22/1996   | 11/10/2004 | 69633808.4         | DE | METHOD AND APPARATUS FOR CONDITIONING TIMED PROGRAM INDEPENDENT OF TRANSPORT TIMING                 |
| 82844224     | Published   |                | 4/29/2009   |            | 112009004714.9     | DE | Printed Circuit Board Cooling Assembly                                                              |
| 82938293     | Published   |                | 12/2/2009   |            | 112009005186.3     | DE | SIGNAL SENSING DEVICES AND CIRCUIT BOARDS                                                           |
| 82233746     | Published   |                | 5/21/2008   |            | 112008001945.2     | DE | TAMPER-EVIDENT CONNECTOR                                                                            |
| 84022112     | Granted     | 602008033965.3 | 3/31/2008   | 8/20/2014  | 8742453.7          | DE | Automated Power Topology Discovery                                                                  |
| 82102142     | Granted     | 102005008778   | 2/25/2005   | 2/27/2014  | 102005008778.7     | DE | Bus Configuration Multiplexer                                                                       |
| 81986516     | Granted     | 60202618       | 8/13/2002   | 1/12/2005  | 2757123.1          | DE | Asymmetric Wireless Communication System Using Two Different Radio Technologies                     |
| 82266587     | Granted     | 69836271.3     | 5/28/1998   | 10/25/2006 | 98924930.5         | DE | Multilayer Firewall System                                                                          |
| 81978899     | Granted     | 60206540.2     | 1/28/2002   | 10/12/2005 | 2250543.2          | DE | Apparatus And Method For Retrieving Data Cartridge Information External To A Media Storage System   |
| 82005002     | Granted     | 60332514.9     | 7/11/2003   | 5/12/2010  | 3254395.1          | DE | Intrusion Monitors For Media Storage Systems                                                        |
| 82029095     | Granted     | 19828619.8     | 6/26/1998   | 10/24/2002 | 19828619.8         | DE | Tape Cartridge Reel Lock                                                                            |
| 82047137     | Granted     | 10113779.6     | 3/21/2001   | 1/12/2006  | 10113779.6         | DE | Positioning System For Removable Data Storage Cartridges                                            |
| 82047143     | Granted     | 10164927.4     | 3/21/2001   | 11/25/2010 | 10164927.4         | DE | Positioning System For Removable Data Storage Cartridges                                            |
| 82901625     | Granted     | 60241169.6     | 12/6/2002   | 9/28/2011  | 2786899.1          | DE | Network User Authentication System And Method                                                       |
| 83164610     | Granted     | 1846867        | 1/20/2006   | 1/9/2013   | 6719098.3          | DE | Non-invasive Method And System For Automated Administration Of Diverse Security Constrained Servers |
| 83810196     | Granted     | 1884872        | 7/13/2007   | 2/26/2014  | 7013794.8          | DE | Method And System For Using Application Development Data To Instantiate Support Information         |
| 82060064     | Granted     | 60130434.9     | 5/10/2001   | 9/12/2007  | 1111444.4          | DE | Method, Computer System And Computer Program For Monitoring Objects In An IT Network                |
| 82584176     | To Be Filed |                |             |            |                    | DE | Hierarchical Policy Management                                                                      |
| 82062557     | Granted     | 60037972.8     | 10/10/2000  | 2/6/2008   | 308910.9           | DE | E-appliances                                                                                        |
| 82097456     | Granted     | 10260926.8     | 12/20/2002  | 12/1/2005  | 10260926.8         | DE | Communication Method                                                                                |
| 82198598     | Granted     | 602005008186   | 1/31/2005   | 7/16/2008  | 5300075.8          | DE | Signalling Point                                                                                    |
| 82281443     | Granted     | 602005000679.6 | 1/5/2005    | 3/14/2007  | 5250014.7          | DE | Method And System For Modelling A Communications Network                                            |
| 82603034     | Granted     | 602004031637.7 | 7/23/2004   | 3/2/2011   | 4766305.9          | DE | Methods And Apparatus For Controlling Signalling Gateways                                           |
| 82924038     | Granted     | 602006026977.3 | 1/13/2006   | 1/11/2012  | 6704619.3          | DE | IMPROVEMENTS IN OR RELATING TO COMMUNICATION SYSTEMS                                                |
| 83004404     | Granted     | 1202176        | 10/31/2000  | 4/25/2012  | 410131.7           | DE | Message-based Software System                                                                       |
| 83192845     | Granted     | 602006034751   | 4/10/2006   | 2/27/2013  | 6743275.7          | DE | IMPROVEMENTS IN OR RELATING TO COMMUNICATIONS                                                       |
| 83194262     | Granted     | 2074771        | 10/1/2007   | 2/27/2013  | 7820748.7          | DE | Management Of Access To Address Data                                                                |
| 82128179     | Granted     | 69720594       | 6/4/1997    | 4/9/2003   | 97303798.9         | DE | CONNECTING EXPANSION CARDS                                                                          |
| 84140185     | Published   |                | 10/26/2012  |            | 112012006651       | DE | PROCESSING STREAMING DATA WITH OPEN EXECUTORS                                                       |
| 82198535     | Granted     | 602005003984.8 | 6/6/2005    | 12/26/2007 | 5104894            | DE | Cryptographic Method And Apparatus                                                                  |

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| 83209015     | Published |                | 11/1/2010   |            | 112010005970.5     | DE | STORAGE ELEMENT READING USING RING OSCILLATOR                                                                                                                |
| 82077359     | Granted   | 69734059.7     | 4/24/1997   | 8/24/2005  | 97922456.5         | DE | A System And Method For Secure Network Electronic Payment And Credit Collection                                                                              |
| 82253228     | Granted   | 60220662.6     | 4/23/2002   | 6/13/2007  | 2726784.8          | DE | Method And System For Reporting XML Data Based On Precomputed Context And A Document Object Model                                                            |
| 82128614     | Granted   | 69718859       | 8/13/1997   | 2/5/2003   | 97306154.2         | DE | A SERVER CONTROLLER CONFIGURED TO SNOOP AND RECEIVE A DUPLICATIVE COPY OF DISPLAY DATA PRESENTED TO A VIDEO CONTROLLER                                       |
| 82094651     | Granted   | 602004010270.9 | 7/22/2004   | 11/21/2007 | 4743493.1          | DE | Improvements Relating To Quantum Cryptography                                                                                                                |
| 82234685     | Published |                | 9/8/2008    |            | 112008002444.8     | DE | Electrical Contact Apparatus For Optical Waveguides                                                                                                          |
| 82242674     | Published |                | 4/2/2008    |            | 112008003797.3     | DE | PRISM BEAMSPLITTERS                                                                                                                                          |
| 82245485     | Published |                | 5/7/2008    |            | 112008003853.8     | DE | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                                                                             |
| 82634146     | Published |                | 8/26/2008   |            | 112008003994.1     | DE | Tunable Nanowire Resonant Cavity For Optical Modulation                                                                                                      |
| 83553806     | Granted   | 2080046        | 10/16/2007  | 9/4/2013   | 7852817.1          | DE | Photonic-based Interconnects For Interconnecting Multiple Integrated Circuits                                                                                |
| 82002878     | Granted   | 10231160       | 7/10/2002   | 10/11/2012 | 10231160.9         | DE | Loadshedding Uninterruptible Power Supply                                                                                                                    |
| 83053690     | Granted   | 2292082        | 4/14/2008   | 8/1/2012   | 8780524.8          | DE | Fan For Computer Element In The Service Position                                                                                                             |
| 82097834     | Granted   | 60305436.6     | 11/21/2003  | 5/24/2006  | 3812445.9          | DE | Cooling System With Evaporators Distributed In Series                                                                                                        |
| 82223507     | Published |                | 3/21/2008   |            | 112008000800       | DE | Three-dimensional Crossbar Array Systems And Methods For Writing Information To And Reading Information Stored In Three-dimensional Crossbar Array Junctions |
| 82654392     | Granted   | 602004032628.3 | 5/28/2004   | 5/11/2011  | 4753796.4          | DE | Air Re-circulation Index                                                                                                                                     |
| 83862779     | Published |                | 11/11/2011  |            | 112011105708.3     | DE | MANAGING AIRFLOW PROVISIONING                                                                                                                                |
| 84088675     | Published |                | 4/30/2012   |            | 112012006296.5     | DE | NOTIFICATION BASED ON AN EVENT IDENTIFIED FROM VIBRATION DATA                                                                                                |
| 82277129     | Granted   | 60316861.2     | 3/28/2003   | 10/17/2007 | 3251967            | DE | Method And Apparatus For Encrypting/decrypting Data                                                                                                          |
| 82977451     | Granted   | 1271313        | 6/12/2002   | 8/8/2012   | 2254078.5          | DE | Performing Secure And Insecure Computing Operations In A Compartmented Operating System                                                                      |
| 83835723     | Granted   | 2126770        | 1/21/2008   | 3/19/2014  | 8702121.8          | DE | TRUSTED COMPUTING ENTITIES                                                                                                                                   |
| 82090712     | Granted   | 602004020144.8 | 1/19/2004   | 3/25/2009  | 4001012.6          | DE | Modular Storage Library With Automatic Configuration                                                                                                         |
| 83185305     | Granted   | 69840555.2     | 12/17/1998  | 2/11/2009  | 6011256.8          | DE | Tape Leader Pin Assembly And Method For Making The Same                                                                                                      |
| 83593525     | Granted   | 913824         | 10/30/1998  | 8/14/2013  | 98308901.2         | DE | Generating appendable points in encoded data                                                                                                                 |
| 83821050     | Granted   | 1592004        | 4/27/2005   | 3/12/2014  | 602005042906.9     | DE | METHOD AND APPARATUS FOR RECORDING DATA ONTO A RECORDING MEDIUM INCLUDING WARNING OF THE APPROACH TO AN END OF MEDIUM POSITION                               |
| 81978518     | Granted   | 10205762.1     | 2/12/2002   | 4/13/2006  | 10205762.1         | DE | Method And Structure For Characterization Of Bayesian Belief Networks                                                                                        |

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| 82071041     | Granted   | 60118327.4    | 6/8/2001    | 3/29/2006  | 1410070.5          | DE | A Method Of Providing Access To Computer Configuration Information To An Interested Party, An Arrangement Apparatus For Providing Remote Support To A Computer User, And Apparatus For Obtaining Remote Support For Computer User |
| 82082717     | Granted   | 10348330.6    | 10/17/2003  | 5/18/2006  | 10348330.6         | DE | Systems And Methods For Remote Testing Of Printing Devices                                                                                                                                                                        |
| 83146745     | Granted   | 2352953       | 11/13/2009  | 41276      | 9775127.5          | DE | Data Centre And Apparatus And Method For Data Centre Cooling                                                                                                                                                                      |
| 82180988     | Granted   | 102007048507  | 10/10/2007  | 3/25/2014  | 102007048507.9     | DE | Cache Memory System And Method For Providing Transactional Memory                                                                                                                                                                 |
| 82938267     | Published |               | 2/26/2010   |            | 112010003368.4     | DE | RESTORING STABILITY TO AN UNSTABLE BUS                                                                                                                                                                                            |
| 82128731     | Granted   | 69731936.9    | 12/30/1997  | 38336      | 69731936.9         | DE | NETWORK SWITCH WITH MULTIPLE BUS ARCHITECTURE                                                                                                                                                                                     |
| 82129478     | Granted   | 69712448.7    | 12/11/1997  | 37384      | 97310024.1         | DE | SYSTEM AND METHOD FOR SECURE INFORMATION OVER A NETWORK                                                                                                                                                                           |
| 82938218     | Published |               | 1/26/2010   |            | 112010004802.9     | DE | Heat Sink With Multiple Vapor Chambers                                                                                                                                                                                            |
| 83873825     | Published |               | 10/25/2011  |            | 112011105765.2     | DE | DRIVE CARRIER SUBSTRATE                                                                                                                                                                                                           |
| 82030838     | Granted   | 69936679.8    | 3/18/1999   | 8/1/2007   | 99302101.3         | DE | Efficient Routing Of Transactions With Ordering Constraints                                                                                                                                                                       |
| 82232804     | Published |               | 5/27/2008   |            | 112008001957.6     | DE | Systems And Methods For Improving Performance Of A Routable Fabric                                                                                                                                                                |
| 83240742     | Granted   | 2257880       | 3/25/2008   | 5/8/2013   | 8732796.1          | DE | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                                                                                                                                            |
| 82266332     | Granted   | 69634916.7    | 10/11/1996  | 7/6/2005   | 96936429.8         | DE | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS                                                                                                                            |
| 82723766     | Granted   | 60240383.9    | 8/13/2002   | 6/29/2011  | 2255636.9          | DE | Reduced Pin-count System Interface For Gigabit Ethernet Physical Layer Devices                                                                                                                                                    |
| 82274138     | Granted   | 60332838.5    | 6/30/2003   | 6/2/2010   | 3762222.2          | DE | System and Method for a Universal Wireless Access Gateway                                                                                                                                                                         |
| 82061678     | Granted   | 60036539.5    | 6/9/2000    | 9/26/2007  | 304891.5           | DE | Utilization Of Unused Disk Space On Networked Computers                                                                                                                                                                           |
| 81996497     | Granted   | 60316230.4    | 6/19/2003   | 39337      | 3253874.6          | DE | Cartridge-handling Apparatus                                                                                                                                                                                                      |
| 82049627     | Granted   | 10000123.8    | 1/4/2000    | 5/21/2008  | 10000123.8         | DE | Firm Addressing For Devices On A Fibre Channel Arbitrated Loop                                                                                                                                                                    |
| 82891311     | Published |               | 7/29/2009   |            | 112009004988.5     | DE | INTERFACING CLIMATE CONTROLLERS AND COOLING DEVICES                                                                                                                                                                               |
| 83873533     | Granted   | 2249542       | 4/8/2010    | 4/2/2014   | 10159409.1         | DE | Communicating Confidential Information Between An Application And A Database                                                                                                                                                      |
| 81956543     | Granted   | 69620303      | 6/11/1996   | 4/3/2002   | 96109337.4         | DE | Method And Apparatus For Shared Management Information Via A Common Repository                                                                                                                                                    |

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| 82038017     | Granted     | 69817158.6     | 12/10/1998  | 8/13/2003  | 98123600.3         | DE | User Interface Mechanism For Manipulating Context In Computer Management Applications                                                    |
| 82097453     | Granted     | 102004016850.4 | 3/31/2004   | 3/29/2007  | 102004016850.4     | DE | Dynamic Mapping Of Status Messages To Service Elements                                                                                   |
| 82164005     | Granted     | 69631502.5     | 8/9/1996    | 2/11/2004  | 96112876.6         | DE | DISTRIBUTED INTERACTIVE MULTIMEDIA SERVICE SYSTEM                                                                                        |
| 82186733     | Granted     | 602004016566.2 | 7/12/2004   | 9/10/2008  | 4766194.7          | DE | Method And Apparatus For Load-balancing                                                                                                  |
| 82197656     | Granted     | 602004021600.3 | 10/4/2004   | 6/17/2009  | 4300652.7          | DE | Methods And Apparatus For Controlling Signalling Gateways                                                                                |
| 84109794     | Granted     | 1784962        | 7/26/2005   | 4/8/2015   | 5775235.4          | DE | System, Method, And Computer Program Product For Content Delivery In A Push-to-talk Communication System                                 |
| 82189667     | Granted     | 102005048729.7 | 10/12/2005  | 40801      | 102005048729.7     | DE | Methods And Systems For Defragmenting Subnet Space Within An Adaptive Infrastructure                                                     |
| 82101197     | Granted     | 102004007641   | 2/17/2004   | 41459      | 102004007641.3     | DE | Computer System                                                                                                                          |
| 82212323     | Published   |                | 10/4/2007   |            | 102007047377.1     | DE | Memory Access Strobe Configuration System And Process                                                                                    |
| 82215386     | Published   |                | 4/17/2007   |            | 102007018033.2     | DE | Coherency Directory Updating                                                                                                             |
| 82077473     | Granted     | 69730435.3     | 6/17/1997   | 8/25/2004  | 97933142.8         | DE | A System, Method And Article Of Manufacture For Multiple-Entry Point Virtual Point Of Sale Architecture                                  |
| 82256840     | Granted     | 602006007540.5 | 1/10/2006   | 7/1/2009   | 6717875.6          | DE | RFID VEHICLE MANAGEMENT SYSTEM AND METHOD                                                                                                |
| 84210667     | Granted     | 1695468        | 11/19/2004  | 4/15/2015  | 4816965            | DE | LASER-BASED COMMUNICATIONS WITH A REMOTE INFORMATION SOURCE                                                                              |
| 82254278     | Granted     | 60330960.7     | 5/7/2003    | 40191      | 3726681.4          | DE | Data Archive Recovery                                                                                                                    |
| 83189527     | Granted     | 1457007        | 12/17/2002  | 2/13/2013  | 2790678.3          | DE | System For Supply Chain Management Of Virtual Private Network Services                                                                   |
| 81968465     | Granted     | 10113191.7     | 3/19/2001   | 11/4/2004  | 10113191.7         | DE | Speculative Pre-Flush Of Data In An Out-Of-Order Execution Processor System                                                              |
| 81978767     | Granted     | 60220113.6     | 3/22/2002   | 5/16/2007  | 2252102.5          | DE | Inventory Control Apparatus And Method For A Data Storage System                                                                         |
| 82810922     | Granted     | 602006026897.1 | 11/1/2006   | 1/4/2012   | 6844255.7          | DE | Crossbar-array Designs And Wire Addressing Methods That Tolerate Misalignment Of Electrical Components With Wires At Wire Overlap Points |
| 82182608     | Granted     | 602005006977.1 | 1/28/2005   | 5/21/2008  | 5722583.1          | DE | Determining Location Information For A Node In A Network Using At Least One Local Landmark Node                                          |
| 8354273      | Granted     | 2137888        | 4/2/2008    | 8/21/2013  | 8742575.7          | DE | Available Bandwidth Estimation                                                                                                           |
| 83694853     | Granted     | 1719308        | 1/28/2005   | 10/16/2013 | 5722658.1          | DE | Selecting Nodes Close To Another Node In A Network Using Location Information For The Nodes                                              |
| 84077563     | Application |                | 7/30/2012   |            | 112012006751.7     | DE | PROVIDING AGREEMENT INFORMATION TO ALLOW ACCESS BY A CLIENT DEVICE OF SELECTED EQUIPMENT FROM AMONG MULTIPLE EQUIPMENT                   |
| 82232489     | Published   |                | 7/30/2008   |            | 112008002057.4     | DE | Photonic Guiding Device                                                                                                                  |
| 82595703     | Granted     | 112008003958   | 7/31/2008   | 4/2/2015   | 112008003958.5     | DE | Nano-wire Optical Block Devices For Amplifying, Modulating, And Detecting Optical Signals                                                |

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| 82672113     | Granted     | 60336240       | 8/11/2003   | 3/2/2011   | 3785167.2          | DE | Multi-level packet screening with dynamically selected filtering criteria                                                                                                                                            |
| 82205273     | Granted     | 112007001775.9 | 6/22/2007   | 9/8/2011   | 112007001775.9     | DE | Image Management Methods, Image Management Systems, And Articles Of Manufacture                                                                                                                                      |
| 82235048     | Published   |                | 10/23/2008  |            | 112008002823       | DE | All Optical Fast Distributed Arbitration In A Computer System Device                                                                                                                                                 |
| 82179551     | Granted     | 102005056872   | 11/29/2005  | 2/9/2012   | 102005056872.6     | DE | Multi-chip Module With Power System And Pass-thru Hubs                                                                                                                                                               |
| 83218687     | Published   |                | 10/12/2010  |            | 112010005865.2     | DE | RESOURCE MANAGEMENT FOR DATA CENTERS                                                                                                                                                                                 |
| 82209746     | Granted     | 000460498-0001 | 1/3/2006    | 1/3/2006   | 000460498-0001     | EM | Computer Having A Pull-tab                                                                                                                                                                                           |
| 82238891     | Granted     | 000895552-0001 | 2/29/2008   | 2/29/2008  | 000895552-0001     | EM | Bronco Front Bezel                                                                                                                                                                                                   |
| 83786685     | Granted     | 002423624-0001 | 3/12/2014   | 5/20/2014  | 2423624            | EM | FRONT BEZEL FOR AN UNINTERRUPTIBLE POWER SYSTEMS (UPS) TOWER                                                                                                                                                         |
| 83787456     | Granted     | 002423616-001  | 3/12/2014   | 5/20/2014  | 2423616            | EM | FRONT BEZEL FOR AN UNINTERRUPTIBLE POWER SYSTEMS (UPS) RACK AND TOWER                                                                                                                                                |
| 84044314     | Granted     | 002608836-0001 | 1/6/2015    | 6/1/2015   | 2608836            | EM | Eagle 2U storage Node - Design                                                                                                                                                                                       |
| 84044326     | Application |                | 1/8/2015    |            | 2610378            | EM | HANDLE FOR A CARRIER                                                                                                                                                                                                 |
| 84044338     | Granted     | 002599530-0001 | 12/17/2014  | 12/17/2014 | 2599530            | EM | SLED FOR A CARRIER                                                                                                                                                                                                   |
| 84096766     | Granted     | 002599555-0001 | 12/17/2014  | 12/17/2014 | 2599555            | EM | HANDLE FOR A CARRIER                                                                                                                                                                                                 |
| 84191356     | Application |                | 5/26/2015   |            | 2707612            | EM | HANDLE                                                                                                                                                                                                               |
| 84191576     | Application |                | 5/26/2015   |            | 2707570            | EM | ROUTER                                                                                                                                                                                                               |
| 83964975     | Granted     | 002423616-0002 | 3/12/2014   | 5/20/2014  | 2423616            | EM | Front Bezel for an Uninterruptible Power systems (UPS) Rack and Tower                                                                                                                                                |
| 83120480     | Granted     | 002094128-0002 | 8/29/2012   | 8/29/2012  | 002094128-0002     | EM | A Removable Bezel of a Computing Device with an LCD Display                                                                                                                                                          |
| 84044302     | Granted     | 002621201-0001 | 1/27/2015   | 1/27/2015  | 2621201            | EM | Eagle low-cost Small Form Factor Hard Drive Carrier – Design                                                                                                                                                         |
| 84096659     | Granted     | 002609719-0001 | 1/7/2015    | 7/1/2015   | 2609719            | EM | ENCLOSURE                                                                                                                                                                                                            |
| 82897861     | Granted     | 001967530-0001 | 12/22/2011  | 12/22/2011 | 1967530            | EM | Hard Drive Carrier                                                                                                                                                                                                   |
| 83570666     | Granted     | 002302711-0001 | 9/4/2013    | 9/4/2013   | 2302711            | EM | Top Loading Fan Cartridge                                                                                                                                                                                            |
| 83584417     | Granted     | 23026120001    | 9/4/2013    | 9/4/2013   | 2302612            | EM | BEZEL FOR A TOP LOADING SERVER CARTRIDGE                                                                                                                                                                             |
| 84044290     | Granted     | 002610386-0001 | 1/8/2015    | 3/30/2015  | 2610386            | EM | HOT PLUG BUTTON WITH AN IDENTIFYING COLORED STRIPE                                                                                                                                                                   |
| 84095591     | Application |                | 1/6/2015    |            | 2608877            | EM | CABINET                                                                                                                                                                                                              |
| 84096776     | Granted     | 002599589-0001 | 12/17/2014  | 12/17/2014 | 2599589            | EM | A smart adapter that enables non-hot pluggable NGFF (M.2) drives to be placed in hot pluggable carriers and inserted into the adapter. The adapter is compatible with the standard small form factor hard drive bay. |
| 84191546     | Instructed  |                |             |            |                    | EM | RDX MicroServer Module                                                                                                                                                                                               |
| 82211762     | Granted     | 000580733-0001 | 8/21/2006   | 8/21/2006  | 000580733-0001     | EM | Claimshell Package                                                                                                                                                                                                   |

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| 83112387     | Granted   | 002094128-0001 | 8/29/2012   | 8/29/2012  | 002094128-0001     | EM | A Removable Bezel of a Computing Device with an LCD Display                                                      |
| 81982883     | Published |                | 12/17/2002  |            | 2258684.6          | EP | Adapting Bayesian Network Parameters On-line In A Dynamic Environment                                            |
| 82062716     | Published |                | 7/3/2001    |            | 1305748.4          | EP | Performance Of A Service On A Computing Platform                                                                 |
| 82065527     | Published |                | 12/19/2002  |            | 2258764.6          | EP | System And Method For Partitioning A Storage Area Network                                                        |
| 82065536     | Published |                | 12/19/2002  |            | 2258808.1          | EP | Associated Data Library                                                                                          |
|              |           |                |             |            |                    |    | System And Method For Partitioning A Storage Area Network<br>Associated Data Library Employing Element Addresses |
| 82065545     | Published |                | 12/19/2002  |            | 2258773.7          | EP | System And Method For Managing Access To Multiple Devices In A Partitioned Data Library                          |
| 82065596     | Published |                | 12/19/2002  |            | 2258807.3          | EP | Method For Using Partitioning To Provide Capacity On Demand In Data Libraries                                    |
| 82069349     | Published |                | 2/19/2001   |            | 1904210            | EP | Address Mapping In Solid State Storage Device                                                                    |
| 82087202     | Published |                | 10/24/2003  |            | 3024603.7          | EP | Enhanced Antenna Using Flexible Circuitry                                                                        |
| 82095317     | Published |                | 10/15/2004  |            | 4791235.7          | EP | Voice Mark-up Language Having An Application Transfer Tag And Interpreter Therefor                               |
| 82171163     | Published |                | 7/21/2006   |            | 6788134.2          | EP | Quantum Information Conversion Between Matter And Light Representations                                          |
| 82172303     | Published |                | 5/7/2004    |            | 4252669.9          | EP | Computer Service Using Automated Local Diagnostic Data Collection And Automated Remote Analysis                  |
| 82176722     | Published |                | 9/18/2003   |            | 3292291.6          | EP | Email Delivery In Telecommunications Networks                                                                    |
| 82180142     | Published |                | 5/10/2005   |            | 5252846            | EP | Access Control Of Resources Using Tokens                                                                         |
| 82181402     | Published |                | 4/27/2005   |            | 5103468.4          | EP | Tape Drive Apparatus                                                                                             |
| 82188638     | Published |                | 4/28/2005   |            | 5741090.4          | EP | Non-demolition Photon Detector That Preserves Input State Characteristics                                        |
| 82188764     | Published |                | 9/29/2005   |            | 5300785.2          | EP | Remote Media Source Device Access                                                                                |
| 82191449     | Published |                | 1/19/2006   |            | 6100625            | EP | Printer Voice Portal                                                                                             |
| 82192268     | Published |                | 4/29/2004   |            | 4300243.5          | EP | Content Delivery During Call Setup                                                                               |
| 82192841     | Published |                | 8/5/2005    |            | 5778411.8          | EP | System, Method And Apparatus For Cryptography Key Management For Mobile Devices                                  |
| 82194956     | Published |                | 9/22/2005   |            | 5108751.8          | EP | Method And System For Managing Memory                                                                            |
| 82201367     | Published |                | 10/6/2005   |            | 5021801.5          | EP | Incremental Backup Operations In Storage Networks                                                                |
| 82202501     | Published |                | 8/3/2006    |            | 6254076            | EP | Collecting Information At A Remote Site                                                                          |
| 82204559     | Published |                | 3/13/2006   |            | 6300224            | EP | Communication System And Method                                                                                  |
| 82205009     | Published |                | 10/19/2005  |            | 5796980            | EP | IMPROVEMENTS IN OR RELATING TO TELECOMMUNICATIONS                                                                |
| 82205570     | Published |                | 3/17/2006   |            | 6738742.3          | EP | Message Exchange Between Software Components                                                                     |
| 82206449     | Published |                | 10/7/2005   |            | 5300801.7          | EP | Prediction Of Service Level Compliance In IT Infrastructures                                                     |

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| 82207007     | Published |               | 1/19/2006   |            | 6707760.2 EP       |    | TRANSACTION PROXY IN A TELECOMMUNICATIONS OR<br>MESSAGING SYSTEM AND RELATED METHODS                               |
| 82210193     | Published |               | 4/25/2005   |            | 5300314.1 EP       |    | STATE MACHINE-DRIVEN INTERACTIVE SYSTEM AND<br>ASSOCIATED METHODS                                                  |
| 82213364     | Published |               | 2/15/2007   |            | 7750745.7 EP       |    | COMPOSITE EVANESCENT WAVEGUIDES AND ASSOCIATED<br>METHODS                                                          |
| 82214438     | Published |               | 1/3/2007    |            | 7703595.4 EP       |    | Improvements In Or Relating To Group Communications<br>DETECTION OF CLONED IDENTIFIERS IN COMMUNICATION<br>SYSTEMS |
| 82218545     | Published |               | 5/22/2006   |            | 6300508.6 EP       |    | System And Method Of Managing A Computer Network Using<br>Hierarchical Layer Information                           |
| 82220612     | Published |               | 7/19/2007   |            | 7112796.3 EP       |    | Data-object-related-request Routing In A Dynamic,<br>Distributed Data-storage System                               |
| 82222724     | Published |               | 8/9/2007    |            | 7836740.6 EP       |    | Call Routing                                                                                                       |
| 82222907     | Published |               | 7/10/2007   |            | 7112204.8 EP       |    | Software Failure Analysis Method And System                                                                        |
| 82225235     | Published |               | 1/30/2007   |            | 7101449.2 EP       |    | Configuration Management Database And System                                                                       |
| 82227173     | Published |               | 3/20/2008   |            | 8153133.7 EP       |    | APPARATUS AND METHODS FOR ADAPTIVE THROTTLING OF<br>TRAFFIC ACROSS MULTIPLE NETWORK NODES                          |
| 82227605     | Published |               | 4/4/2008    |            | 8745102.7 EP       |    | Method Of Supplying Advertising Content                                                                            |
| 82228025     | Published |               | 4/16/2007   |            | 7106253.3 EP       |    | METHODS FOR PROVIDING SECURE Ecommerce<br>TRANSACTIONS                                                             |
| 82228727     | Published |               | 1/23/2008   |            | 8728109.3 EP       |    | CONFIGURATION OF MOBILE COMMUNICATION DEVICES                                                                      |
| 82229777     | Published |               | 1/29/2008   |            | 8708350.7 EP       |    | Data Skew Insensitive Parallel Join Scheme                                                                         |
| 82230338     | Published |               | 7/2/2008    |            | 8252246.7 EP       |    | Method And Apparatus For Multimedia Data Management<br>On Mobile Devices                                           |
| 82231406     | Published |               | 8/28/2007   |            | 7827544.3 EP       |    | Integrated Circuit With Optical Interconnect                                                                       |
| 82231661     | Published |               | 10/23/2008  |            | 8842402.3 EP       |    | Misalignment Tolerant Free Space Optical Transceiver                                                               |
| 82234529     | Published |               | 6/16/2008   |            | 8768550.9 EP       |    | Changing Power States Of Data-handling Devices To Meet<br>Redundancy Criterion                                     |
| 82237856     | Published |               | 2/15/2008   |            | 8730044.8 EP       |    | Adjustable Server-transmission Rates Over Fixed-speed<br>Backplane Connections Within A Multi-server Enclosure     |
| 82238165     | Published |               | 4/28/2008   |            | 8779594.4 EP       |    | Disk Drive Data Encryption                                                                                         |
| 82239095     | Published |               | 4/2/2008    |            | 8744892.4 EP       |    | Method And Apparatus For Accessing A Network                                                                       |
| 82240226     | Published |               | 11/16/2007  |            | 7301555.4 EP       |    | Method And Apparatus For Converting AC Power To DC<br>Power                                                        |
| 82240589     | Published |               | 2/28/2008   |            | 8726257.2 EP       |    | Cable Management Module                                                                                            |
| 82240604     | Published |               | 3/10/2008   |            | 8743751.3 EP       |    | Software-based Power Capping                                                                                       |
| 82240658     | Published |               | 3/3/2008    |            | 8731254.2 EP       |    | POWER SUPPLY ASSEMBLY FOR SERVER RACK AND METHOD<br>FOR                                                            |
| 82240832     | Published |               | 4/30/2008   |            | 8747191.8 EP       |    | MOUNTING POWER SUPPLY FOR SERVER RACK                                                                              |

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| 82242089     | Published   |               | 2/15/2008   |            | 8716895.1 EP       | EP | METHOD AND COMPUTER PROGRAM PRODUCT FOR CHANGING AN IT SYSTEM                                                          |
| 82242536     | Published   |               | 3/10/2008   |            | 8726645.8 EP       | EP | Two-phase Optical Communication Methods And Optical Systems For Implementing The Same                                  |
| 82242710     | Application |               | 5/1/2008    |            | 8754977 EP         | EP | Storing Checkpoint Data In Non-volatile Memory                                                                         |
| 82243652     | Published   |               | 1/9/2009    |            | 9150283.1 EP       | EP | SHARING STATUS INFORMATION ACROSS A PLURALITY OF COMMUNICATION NETWORKS                                                |
| 82244897     | Published   |               | 6/19/2008   |            | 8771441.6 EP       | EP | Capacity Planning                                                                                                      |
| 82246721     | Published   |               | 7/1/2008    |            | 6846647.3 EP       | EP | System And Method For Automated And Assisted Resolution Of IT Incidents                                                |
| 82247069     | Published   | 2166703       | 9/21/2009   |            | 9170876.8 EP       | EP | Method And System For Managing A Hierarchical Information Base With An Application Layer Protocol                      |
| 82247453     | Published   |               | 9/29/2008   |            | 8873292 EP         | EP | Neuromorphic Circuit                                                                                                   |
| 82247828     | Published   |               | 5/6/2008    |            | 8755090.1 EP       | EP | FABRICATION OF THIN PELLICLE BEAM SPLITTERS                                                                            |
| 82252082     | Published   |               | 4/19/2000   |            | 926146.2 EP        | EP | ATM Video Advertising                                                                                                  |
| 82253336     | Published   |               | 10/10/2002  |            | 2757780.8 EP       | EP | Method And Apparatus For Processing Financial Transactions                                                             |
| 82254086     | Published   |               | 5/29/2008   |            | 8769771 EP         | EP | TESTING DISASTER RECOVER ELEMENTS                                                                                      |
| 82254146     | Published   |               | 6/12/2003   |            | 3760284.4 EP       | EP | Multi-tiered Enterprise Management System And Method Including A Presentation Services Unit External To The Enterprise |
| 82254809     | Published   |               | 2/26/2004   |            | 4715059.4 EP       | EP | Administering A Security System                                                                                        |
| 82255625     | Published   |               | 8/3/2004    |            | 4779919.2 EP       | EP | Method And System For Effecting Payment By Checks Through The Use Of Image Replacement Documents                       |
| 82256144     | Published   |               | 11/19/2004  |            | 4817857.8 EP       | EP | ENCRYPTION/DECRYPTION PAY PER USE WEB SERVICE                                                                          |
| 82256195     | Published   |               | 6/15/2005   |            | 5762596.4 EP       | EP | Virtual User Interface For Multiple User Devices                                                                       |
| 82256318     | Application |               | 9/6/2006    |            | 6814186 EP         | EP | SYSTEMS AND METHODS FOR THE PROVISION OF DATA PROCESSING SERVICES TO MULTIPLE ENTITIES                                 |
| 82256432     | Published   |               | 10/25/2005  |            | 5816016.9 EP       | EP | METHOD AND SYSTEM FOR NETWORK INTRUSION PREVENTION                                                                     |
| 82256684     | Published   |               | 1/17/2006   |            | 6718603.1 EP       | EP | ENTERPRISE DIGITAL ASSET MANAGEMENT SYSTEM AND METHOD                                                                  |
| 82256699     | Published   |               | 1/26/2006   |            | 6719653.5 EP       | EP | System And Method For Securing Information Accessible Using A Plurality Of Software Applications                       |
| 82256744     | Published   |               | 7/8/2005    |            | 5769551.2 EP       | EP | SYSTEM AND METHOD FOR UPDATING SOFTWARE ON A COMPUTER                                                                  |
| 82256759     | Published   |               | 10/20/2005  |            | 5816326.2 EP       | EP | System And Method For Tracking Individuals                                                                             |
| 82256771     | Allowed     |               | 10/17/2005  |            | 5814810.7 EP       | EP | SYSTEM AND METHOD FOR SIGNALING STATUS OF TRAFFIC FLOW                                                                 |
| 82256948     | Published   |               | 3/20/2006   |            | 6739093 EP         | EP | Validating Application Resources                                                                                       |

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| 82257023     | Published   |               | 9/18/2006   |            | 6803794.4          | EP | Locating Documents Supporting Enterprise Goals                                                                                              |
| 82257143     | Application |               | 3/26/2007   |            | 7754054            | EP | Determining Processing Times At Stations In An Assembly System                                                                              |
| 82257518     | Published   |               | 4/9/2009    |            | 9730420.8          | EP | APPARATUS, AND ASSOCIATED METHOD, FOR ALLOCATING PROCESSING AMONGST DATA CENTERS                                                            |
| 82257563     | Published   |               | 4/20/2009   |            | 9158277.5          | EP | System And Method For Application And Environment Portability                                                                               |
| 82257626     | Published   |               | 7/24/2009   |            | 9803416.8          | EP | SYSTEM AND METHOD FOR A VIRTUALIZATION INFRASTRUCTURE MANAGEMENT ENVIRONMENT                                                                |
| 82257752     | Published   |               | 7/21/2009   |            | 9820945.5          | EP | System And Method For Electronic Data Security                                                                                              |
| 82274858     | Published   |               | 12/14/2007  |            | 7254877.9          | EP | Network Traffic Redirection In Bi-Planar Networks                                                                                           |
| 82405606     | Published   |               | 5/8/2008    |            | 8780608.9          | EP | Hierarchical Passive Networks                                                                                                               |
| 82554383     | Published   |               | 5/23/2008   |            | 8756236.9          | EP | Optical Interconnect                                                                                                                        |
| 82554397     | Published   |               | 6/20/2008   |            | 8771588.4          | EP | LOW LEVEL INITIALIZER                                                                                                                       |
| 82554426     | Published   |               | 6/20/2008   |            | 8771579.3          | EP | DOMAIN MANAGEMENT PROCESSOR                                                                                                                 |
| 82579352     | Published   |               | 4/3/2007    |            | 7760047.6          | EP | Merging Multi-Line Log Entries                                                                                                              |
| 82579369     | Published   |               | 10/25/2007  |            | 7868579.9          | EP | Tracking Changing State Data To Assist In Computer Network Security                                                                         |
| 82579544     | Published   |               | 12/28/2007  |            | 7870034.1          | EP | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security                                               |
| 82584158     | Application |               | 8/4/2009    |            | 9807071.7          | EP | BOOKMARKS FOR FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                                                              |
| 82584164     | Published   |               | 8/4/2009    |            | 9807072.5          | EP | APPARATUS, AND ASSOCIATED METHOD, FOR DETECTING FRAUDULENT TEXT MESSAGE                                                                     |
| 82620391     | Published   |               | 8/8/2008    |            | 8795141.4          | EP | Method And Systems For Implementing High-radix Switch Topologies On Relatively Lower-radix Switch Physical Networks                         |
| 82621149     | Published   |               | 8/8/2008    |            | 8814827.5          | EP | Independently Controlled Virtual Memory Devices In Memory Modules                                                                           |
| 82629484     | Application |               | 8/8/2008    |            | 8795140.6          | EP | Independently Controllable And Reconfigurable Virtual Memory Devices In Memory Modules That Are Pin-compatible With Standard Memory Modules |
| 82631609     | Published   |               | 10/30/2008  |            | 8877869.1          | EP | RECONFIGURING A MODEL                                                                                                                       |
| 82631731     | Published   |               | 8/4/2009    |            | 9805412.5          | EP | End-to-end Network Access Analysis                                                                                                          |
| 82651150     | Published   |               | 9/23/2009   |            | 9840564            | EP | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                                                                                  |
| 82653939     | Published   |               | 1/30/2009   |            | 9839423.2          | EP | SYSTEM AND METHOD FOR INTEGRATING CAPACITY PLANNING AND WORKLOAD MANAGEMENT                                                                 |
| 82654454     | Published   |               | 9/4/2008    |            | 8799132.9          | EP | Dielectric Waveguide Intersection With Reduced Losses                                                                                       |

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| 82654465     | Published   |               | 8/27/2008   |            | 8798754.1 EP       |    | Performing Zone Based Workload Scheduling According To Environmental Conditions                    |
| 82665385     | Published   |               | 10/27/2009  |            | 9824065.8 EP       |    | Telecommunication Systems                                                                          |
| 82671798     | Published   |               | 9/3/2009    |            | 9782563.2 EP       |    | Program Guide And Apparatus                                                                        |
| 82671978     | Application |               | 12/9/2008   |            | 8878800.5 EP       |    | Power Circuit                                                                                      |
| 82676469     | Published   |               | 10/21/2009  |            | 9826517.6 EP       |    | DATA CENTER AND DATA CENTER DESIGN                                                                 |
| 82676538     | Published   |               | 10/14/2008  |            | 8825408.1 EP       |    | Managing Event Traffic In A Network System                                                         |
| 82678092     | Published   |               | 7/22/2009   |            | 9780919.8 EP       |    | OKD Transmitter And Transmission Method                                                            |
| 82691757     | Published   |               | 9/4/2009    |            | 9812310.2 EP       |    | Storing Log Data Efficiently While Supporting Querying                                             |
| 82716609     | Published   |               | 10/30/2008  |            | 8877873.3 EP       |    | BIT Inversion For Communication Interface                                                          |
| 82716666     | Published   |               | 10/31/2008  |            | 8877896.4 EP       |    | Device For Optically Coupling Photonic Elements                                                    |
| 82716715     | Published   |               | 10/31/2008  |            | 8877838.6 EP       |    | Optical Broadcast With Buses With Shared Optical Interfaces                                        |
| 82718593     | Published   |               | 1/27/2010   |            | 10701247.8 EP      |    | REVERSE CHARGE CALLING IN A COMMUNICATIONS NETWORK                                                 |
| 82728099     | Published   |               | 12/19/2008  |            | 8879034 EP         |    | Redundant Data Storage For Uniform Read Latency                                                    |
| 82750060     | Application |               | 12/19/2008  |            | 8878866.6 EP       |    | Document Information Selection Method And Computer Program Product                                 |
| 82752235     | Published   |               | 1/23/2009   |            | 9839002.4 EP       |    | System And Methods For Allocating Shared Storage Resources                                         |
| 82772044     | Published   |               | 1/29/2009   |            | 9839407.5 EP       |    | Loading A Plurality Of Appliances Into A Blade                                                     |
| 82774437     | Published   |               | 1/7/2009    |            | 9837735.1 EP       |    | PHOTONIC WAVEGUIDE                                                                                 |
| 82790102     | Published   |               | 1/9/2009    |            | 9837744.3 EP       |    | SYSTEM AND METHODS FOR ROUTING OPTICAL SIGNALS                                                     |
| 82790816     | Published   |               | 1/23/2009   |            | 9839001.6 EP       |    | Verifying Virtual Machines                                                                         |
| 82808642     | Published   |               | 1/30/2009   |            | 9839418.2 EP       |    | Dynamically Applying A Control Policy To A Network                                                 |
| 82819010     | Published   |               | 3/31/2009   |            | 9842813.9 EP       |    | Determining Power Topology Of Plurality Of Computer Systems                                        |
| 82837116     | Published   |               | 11/25/2009  |            | 9797223.6 EP       |    | MODULAR QUERY OPTIMIZER                                                                            |
| 82844163     | Published   |               | 3/23/2009   |            | 9842416.1 EP       |    | INDIRECT-BANDGAP-SEMICONDUCTOR, LIGHT-EMITTING DIODE                                               |
| 82848365     | Application |               | 5/8/2009    |            | 9844210.6 EP       |    | ACCESS CONTROL OF DISTRIBUTED COMPUTING RESOURCES SYSTEM AND METHOD                                |
| 82849066     | Published   |               | 6/29/2009   |            | 9846928.1 EP       |    | MEMORY AGENT TO ACCESS MEMORY BLADE AS PART OF THE CACHE COHERENCY DOMAIN                          |
| 82849083     | Published   |               | 4/17/2009   |            | 9843464 EP         |    | Method And System For Reducing Trace Length And Capacitance In A Large Memory Footprint Background |
| 82850377     | Published   |               | 4/28/2010   |            | 10770275.5 EP      |    | IMPROVEMENTS IN OR RELATING TO DATA CENTERS                                                        |
| 82852392     | Published   |               | 7/14/2009   |            | 9847426.5 EP       |    | Determining A Seasonal Effect In Temporal Data                                                     |
| 82852404     | Published   |               | 7/31/2009   |            | 9847922.3 EP       |    | Compression Of XML Data                                                                            |
| 82853056     | Published   |               | 4/27/2009   |            | 9844137.1 EP       |    | Energy-efficient Standby Mode In A Switching Power Supply                                          |

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| 82853113     | Published |               | 12/18/2009  |            | 9852394.7 EP       |    | Proxy Agents In A Network                                                                    |
| 82853972     | Published |               | 4/17/2009   |            | 9843460.8 EP       |    | Power Capping System And Method                                                              |
| 82856363     | Published |               | 6/1/2010    |            | 10722363.8 EP      |    | METHOD AND APPARATUS FOR ASSOCIATING A SUBSCRIBER IDENTIFIER TO A SUBSCRIBER IDENTIFIER      |
|              |           |               |             |            |                    |    |                                                                                              |
| 82856371     | Published |               | 9/15/2010   |            | 10822410.6 EP      |    | NETWORK ACCESS CONTROL                                                                       |
| 82866141     | Published |               | 5/19/2009   |            | 9844740.2 EP       |    | Network Traffic Rate Limiting System And Method                                              |
| 82866203     | Published |               | 7/10/2009   |            | 9844742.8 EP       |    | Location Determined Network Access                                                           |
| 82873385     | Published |               | 6/29/2009   |            | 9846927.3 EP       |    | HYPERVISOR-BASED MANAGEMENT OF LOCAL AND REMOTE VIRTUAL MEMORY PAGES                         |
|              |           |               |             |            |                    |    |                                                                                              |
| 82878738     | Published |               | 12/20/2011  |            | 11306707.8 EP      |    | SYSTEMS AND METHODS FOR MONITORING COMPLIANCE STATUS BASED ON TIME-ORDERED REFERENCE PERIODS |
|              |           |               |             |            |                    |    |                                                                                              |
| 82879674     | Published |               | 4/30/2009   |            | 9844180.1 EP       |    | OPTICAL APPARATUS, SYSTEM AND METHOD EMPLOYING AN ENDOHEDRAL METALLOFULLERENE                |
|              |           |               |             |            |                    |    |                                                                                              |
| 82885914     | Published |               | 6/18/2009   |            | 9846290.6 EP       |    | PROCESSOR TOPOLOGY SWITCHES                                                                  |
| 82890403     | Published |               | 5/29/2009   |            | 9845348.3 EP       |    | System And Method For Allocating Resources Of A Server To A Virtual Machine                  |
|              |           |               |             |            |                    |    |                                                                                              |
| 82892226     | Published |               | 7/24/2009   |            | 9847655.9 EP       |    | Virtual-machine-based Application-service Provision                                          |
| 82892367     | Published |               | 7/15/2009   |            | 9847433.1 EP       |    | Shared Video Management Subsystem                                                            |
| 82914637     | Published |               | 7/28/2009   |            | 9847903.3 EP       |    | INSTANTIATING AN INFORMATION TECHNOLOGY SERVICE IN LIGHT OF MAINTENANCE REQUIREMENTS         |
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| 82919353     | Published |               | 8/11/2009   |            | 9848325.8 EP       |    | Online Search Base On Geography Tagged Recommendations                                       |
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| 82922921     | Published |               | 12/14/2009  |            | 9847948.8 EP       |    | SELECTIVITY-BASED OPTIMIZED-QUERY-PLAN CACHING                                               |
| 82924234     | Published |               | 3/17/2010   |            | 10848102.9 EP      |    | UNIFIED INFORMATION BUS                                                                      |
| 82924245     | Published |               | 3/30/2010   |            | 10849122.6 EP      |    | SYSTEM AND METHOD FOR OUTER JOINS ON A PARALLEL DATABASE MANAGEMENT SYSTEM                   |
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| 82926258     | Published |               | 9/25/2009   |            | 9849910.6 EP       |    | SILICON-GERMANIUM, QUANTUM-WELL, LIGHT-EMITTING DIODE                                        |
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| 82928811     | Published |               | 1/29/2010   |            | 10844883.8 EP      |    | Configuration Of Network Links In A Virtual Connection Environment                           |
|              |           |               |             |            |                    |    |                                                                                              |
| 82929595     | Published |               | 10/15/2009  |            | 9850474.9 EP       |    | HETEROGENEOUS DATA SOURCE MANAGEMENT                                                         |
| 82929724     | Published |               | 1/27/2011   |            | 11737663.2 EP      |    | Memory Access Methods And Apparatus                                                          |
| 82930245     | Published |               | 9/14/2010   |            | 10817709.8 EP      |    | Automatic Selection Of Agent-based Or Agentless Monitoring                                   |
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| 82930283     | Published |               | 9/29/2010   |            | 10825384 EP        |    | Method And System For Discovering A Pure Hub-and-spoke Topology                              |
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| 82930388     | Published |               | 10/8/2010   |            | 10768000.1 EP      |    | METHOD AND SYSTEM FOR PRINTING                                                               |
| 82930492     | Published |               | 11/30/2009  |            | 9851760 EP         |    | REMAPPING FOR MEMORY WEAR LEVELING                                                           |
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| 82931301     | Published   |               | 10/29/2009  |            | 9850966.4 EP       | EP | SWITCH THAT MONITORS FOR FINGERPRINTED PACKETS                                                                                           |
| 82931325     | Published   |               | 10/29/2009  |            | 9850965.6 EP       | EP | NETWORK SWITCH CONNECTED TO A SENSOR                                                                                                     |
| 82931444     | Published   |               | 3/19/2010   |            | 10848106 EP        | EP | OPTICAL STAR COUPLER                                                                                                                     |
| 82931450     | Published   |               | 3/31/2010   |            | 10849136.6 EP      | EP | WAVEGUIDE SYSTEM AND METHODS                                                                                                             |
| 82933817     | Published   |               | 10/28/2009  |            | 9850959.9 EP       | EP | METHOD AND APPARATUS FOR VIRUS THROTTLING WITH RATE LIMITING                                                                             |
| 82934009     | Published   |               | 1/11/2010   |            | 10842371.6 EP      | EP | SYSTEM INCLUDING DRIVER CIRCUIT FOR ELECTRICAL SIGNALING AND OPTICAL SIGNALING                                                           |
| 82938321     | Published   |               | 12/14/2009  |            | 9852382.2 EP       | EP | MODIFYING COMPUTER MANAGEMENT REQUEST                                                                                                    |
| 82939726     | Published   |               | 1/28/2011   |            | 11737715 EP        | EP | QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS                                                                                            |
| 82941437     | Published   |               | 1/29/2010   |            | 10844871.3 EP      | EP | Wireless Network System And Method Configured To Mitigate Co-channel Interference                                                        |
| 83003347     | Published   |               | 11/9/2010   |            | 10829280.6 EP      | EP | Enabling Full-Text Searching Using A Structured Data Store                                                                               |
| 83007560     | Published   |               | 11/27/2007  |            | 12171526.2 EP      | EP | SYSTEM SYNTHESIS TO MEET AN EXERGY LOSS TARGET VALUE                                                                                     |
| 83034261     | Published   |               | 5/19/2010   |            | 10851573.5 EP      | EP | SYSTEM AND METHOD FOR WEB PAGE SEGMENTATION USING ADAPTIVE THRESHOLD COMPUTATION                                                         |
| 83034270     | Published   |               | 5/20/2010   |            | 10851886.1 EP      | EP | SWITCHING IN A NETWORK DEVICE                                                                                                            |
| 83055106     | Published   |               | 2/22/2011   |            | 11706128.3 EP      | EP | DATABASE DESIGNER                                                                                                                        |
| 83093242     | Published   |               | 6/23/2010   |            | 10853793.7 EP      | EP | Authorization Control                                                                                                                    |
| 83108418     | Published   |               | 4/7/2010    |            | 10849588.8 EP      | EP | SYSTEM AND METHOD FOR AUTOMATED DISCOVERY OF CUSTOMER-EDGE DEVICES AND INTERFACE CONNECTIONS IN A VIRTUAL-PRIVATE-NETWORKING ENVIRONMENT |
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| 83108479     | Published   |               | 4/9/2010    |            | 10849593.8 EP      | EP | Method And System For Comparing And Locating Projects                                                                                    |
| 83108496     | Application |               | 4/9/2010    |            | 10849594.6 EP      | EP | PROJECT CLUSTERING AND RELATIONSHIP VISUALIZATION                                                                                        |
| 83116284     | Published   |               | 2/14/2011   |            | 11766301.3 EP      | EP | SYSTEM AND METHOD FOR PROCESSING DATA                                                                                                    |
| 83118658     | Application |               | 5/26/2010   |            | 10852293.9 EP      | EP | GRAPH AUTHORIZATION                                                                                                                      |
| 83118729     | Application |               | 5/12/2010   |            | 10851506.5 EP      | EP | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE TO UPDATE VIRTUAL MACHINE TEMPLATES                                                       |
| 83120659     | Published   |               | 5/28/2010   |            | 10852314.3 EP      | EP | INITIALIZING A MEMORY SUBSYSTEM OF A MANAGEMENT CONTROLLER                                                                               |
| 83123501     | Published   |               | 5/13/2010   |            | 10851515.6 EP      | EP | FILE SYSTEM MIGRATION                                                                                                                    |
| 83127145     | Published   |               | 6/22/2010   |            | 10853787.9 EP      | EP | METHODS AND SYSTEMS FOR PLANNING APPLICATION DEPLOYMENT                                                                                  |
| 83127159     | Published   |               | 6/22/2010   |            | 10853789.5 EP      | EP | A METHOD AND SYSTEM FOR DETERMINING A DEPLOYMENT OF APPLICATIONS                                                                         |
| 83130010     | Published   |               | 7/21/2010   |            | 10855099.7 EP      | EP | Accessing A Local Storage Device Using An Auxiliary Processor                                                                            |

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| 83131971     | Published   |               | 5/20/2011   |            | 11787160.8 EP      | CC | SECURITY THREAT DETECTION ASSOCIATED WITH SECURITY EVENTS AND AN ACTOR CATEGORY MODEL    |
| 83132406     | Published   |               | 7/30/2007   |            | 12192462.5 EP      | EP | AUTOMATIC VERTICAL-DATABASE DESIGN                                                       |
| 83134885     | Published   |               | 6/16/2010   |            | 10853358.9 EP      | EP | Computer Racks                                                                           |
| 83135455     | Published   |               | 8/17/2010   |            | 10856233.1 EP      | EP | ENCRYPTION KEY MANAGEMENT                                                                |
| 83135749     | Application |               | 6/16/2010   |            | 10853357.1 EP      | EP | SYSTEM FOR INFORMATION MANAGEMENT PROTECTION AND ROUTING                                 |
| 83135881     | Published   |               | 7/29/2010   |            | 10855439.5 EP      | EP | A Device And Method For Egress Packet Forwarding Using Mesh Tagging                      |
| 83137321     | Published   |               | 3/24/2010   |            | 10848589.7 EP      | EP | Power Capping Feedback Normalization                                                     |
| 83138143     | Application |               | 6/9/2010    |            | 10853005.6 EP      | EP | DETERMINING SIMILARITY SCORES OF ANOMALIES                                               |
| 83139121     | Published   |               | 7/13/2010   |            | 10854819.9 EP      | EP | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE TO ARCHIVE DATA                           |
| 83139805     | Application |               | 6/30/2010   |            | 10854218.4 EP      | EP | SYSTEM AND METHOD FOR COLLABORATIVE INFORMATION SERVICES                                 |
| 83163735     | Published   |               | 9/14/2010   |            | 10857369.2 EP      | EP | COMPUTER SYSTEM FABRIC SWITCH                                                            |
| 83165230     | Application |               | 7/22/2010   |            | 10855103.7 EP      | EP | Context-based Item Bookmarking                                                           |
| 83166226     | Published   |               | 7/22/2010   |            | 10855106 EP        | EP | SQL Enumerator                                                                           |
| 83166321     | Published   |               | 7/26/2010   |            | 10855418.9 EP      | EP | A System Including A Module                                                              |
| 83166389     | Published   |               | 7/30/2010   |            | 10855459.3 EP      | EP | LOCATION-INDEXED AUDIO CONTENT                                                           |
| 83184691     | Published   |               | 7/30/2010   |            | 10855450.2 EP      | EP | INFORMATION TECHNOLOGY SERVICE MANAGEMENT SYSTEMS AND METHODS FOR CREDENTIALING          |
| 83184698     | Published   |               | 7/30/2010   |            | 10855466.8 EP      | EP | Transferring Files                                                                       |
| 83187253     | Allowed     |               | 8/25/2010   |            | 10856515.1 EP      | EP | METHOD AND SYSTEM FOR PROCESSING EVENTS                                                  |
| 83189166     | Published   |               | 10/6/2010   |            | 10858236.2 EP      | EP | SYSTEM AND METHOD FOR AUTOMATED DEPLOYMENT OF MULTI-COMPONENT COMPUTER ENVIRONMENT       |
| 83196413     | Published   |               | 9/7/2010    |            | 10857071.4 EP      | EP | METHODS, APPARATUS AND SYSTEMS FOR MONITORING LOCATIONS OF DATA WITHIN A NETWORK SERVICE |
| 83200407     | Published   |               | 9/23/2010   |            | 10857611.7 EP      | EP | SYSTEM AND METHOD FOR INTERPRETING AND GENERATING INTEGRATION FLOWS                      |
| 83208805     | Published   |               | 9/10/2010   |            | 10857079.7 EP      | EP | METHODS AND SYSTEMS FOR GENERATION OF AUTHORIZED VIRTUAL APPLIANCES                      |
| 83209077     | Published   |               | 10/19/2010  |            | 10858739.5 EP      | EP | DISPLAYING SYSTEM PERFORMANCE INFORMATION                                                |
| 83210416     | Application |               | 12/1/2010   |            | EP10859683.4 EP    | EP | Software Application Recognition                                                         |
| 83210557     | Application |               | 10/29/2010  |            | 10858801.3 EP      | EP | SYSTEM AND METHOD FOR QUERING A DATA STREAM                                              |
| 83214684     | Published   |               | 10/11/2010  |            | 10858482.2 EP      | EP | DEVICE STRUCTURE FOR LONG ENDURANCE MEMRISTORS                                           |
| 83215486     | Published   |               | 9/27/2010   |            | 10857972.3 EP      | EP | Filter Regular Expression                                                                |
| 83220845     | Published   |               | 3/28/2013   |            | 13305384.3 EP      | EP | AUTOMATED NEGOTIATION                                                                    |
| 83221589     | Published   |               | 10/8/2010   |            | 10858256 EP        | EP | GENERATING A TAXONOMY FROM UNSTRUCTURED INFORMATION                                      |
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| 83222713     | Published   |               | 11/10/2010  |            | 10859425 EP        |    | SEED SET EXPANSION                                                                          |
| 83224723     | Published   |               | 2/24/2011   |            | 11859288 EP        |    | SYSTEM AND METHOD FOR ERROR REPORTING IN A NETWORK                                          |
| 83224935     | Published   |               | 10/15/2010  |            | 10858508.4 EP      |    | SYSTEM AND METHOD FOR PROVIDING A SERVICE                                                   |
| 83229099     | Published   |               | 10/19/2010  |            | 10858745.2 EP      |    | Managing Content From Structured And Unstructured Data Sources                              |
| 83231547     | Published   |               | 10/27/2010  |            | 10859070.4 EP      |    | SYSTEMS, METHODS, AND APPARATUS FOR ENABLING A TRANSMISSION WITHIN A COMMUNICATIONS SESSION |
|              |             |               |             |            |                    |    |                                                                                             |
| 83235191     | Application |               | 10/22/2010  |            | 10858770 EP        |    | DISTRIBUTED NETWORK INSTRUMENTATION SYSTEM                                                  |
| 83255609     | Application |               | 1/27/2011   |            | 11857343.5 EP      |    | ELECTRONIC BOOK WITH CHANGEABLE PATHS                                                       |
| 83255657     | Published   |               | 2/28/2011   |            | 11840766.7 EP      |    | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                     |
| 83256527     | Published   |               | 1/31/2011   |            | 11841124.8 EP      |    | Method and Circuit for Switching a Memristive Device in an Array                            |
| 83262519     | Published   |               | 12/3/2010   |            | 10860188.1 EP      |    | SYSTEMS AND METHODS FOR PERFORMING A NESTED JOIN OPERATION                                  |
| 83262536     | Application |               | 12/10/2010  |            | 10860412.5 EP      |    | MANAGING RECORDS DISPLAYED IN A TREE LIST                                                   |
| 83262556     | Published   |               | 1/27/2011   |            | 11856921.9 EP      |    | IMPORTANCE CLASS BASED DATA MANAGEMENT                                                      |
| 83262567     | Published   |               | 1/25/2011   |            | 11856881.5 EP      |    | ANALYTICAL DATA PROCESSING                                                                  |
| 83264001     | Published   |               | 11/30/2010  |            | 10860185.7 EP      |    | CHANGE MESSAGE BROADCAST ERROR DETECTION                                                    |
| 83265983     | Published   |               | 12/11/2010  |            | 10860464.6 EP      |    | COMPUTER NETWORK NODE DISCOVERY                                                             |
| 83271698     | Published   |               | 1/31/2011   |            | 11857705.5 EP      |    | METHODS FOR HANDLING CONFLICTS IN A MULTICAST ROUTING ELECTION                              |
| 83410697     | Published   |               | 1/9/2011    |            | 11855220.7 EP      |    | COMPUTER NETWORK NODE DISCOVERY SEQUENCING                                                  |
| 83417892     | Application |               | 1/24/2011   |            | 11879173 EP        |    | A SYSTEM AND METHOD FOR ACCESSING A SERVICE                                                 |
| 83421539     | Published   |               | 1/20/2011   |            | 11856070.5 EP      |    | CHIP CARRIER SUPPORT SYSTEMS                                                                |
| 83422021     | Published   |               | 1/20/2011   |            | 11855929.3 EP      |    | COMPOSITE PROCESSORS                                                                        |
| 83422058     | Published   |               | 1/31/2011   |            | 11857735.2 EP      |    | CABLE HARNESS SWITCHES                                                                      |
| 83422493     | Published   |               | 8/17/2011   |            | 11866806 EP        |    | METHOD OF MANAGING USAGE RIGHTS IN A SHARE GROUP OF SERVERS                                 |
| 83422619     | Published   |               | 2/2/2011    |            | 11857498.7 EP      |    | ESTIMATING A PERFORMANCE CHARACTERISTIC OF A JOB USING A PERFORMANCE MODEL                  |
| 83498559     | Published   |               | 3/11/2011   |            | 11860872.8 EP      |    | Sampling Network Traffic                                                                    |
| 83507396     | Published   |               | 3/1/2012    |            | 12754402.1 EP      |    | METHODS AND SYSTEMS FOR FULL PATTERN MATCHING IN HARDWARE                                   |
| 83515791     | Application |               | 2/1/2011    |            | 11857761.8 EP      |    | NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                                     |
| 83543185     | Published   |               | 3/3/2011    |            | 11860078.2 EP      |    | TESTING INTEGRATED BUSINESS SYSTEMS                                                         |
| 83546342     | Published   |               | 2/10/2011   |            | 11858313.7 EP      |    | GRATING-BASED POLARIZERS AND OPTICAL ISOLATORS                                              |
| 83584528     | Published   |               | 3/15/2011   |            | 11861195.3 EP      |    | USABILITY TESTING                                                                           |

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| 83593353     | Published   |               | 6/2/2011    |            | 11867048.8 EP      | EP | NETWORK VIRTUALIZATION                                                                                                            |
| 83663171     | Published   |               | 4/7/2011    |            | 11862966.6 EP      | EP | GRAPHICAL OBJECT CLASSIFICATION                                                                                                   |
| 83680932     | Published   |               | 3/16/2011   |            | 11861282.9 EP      | EP | SYSTEMS AND METHODS FOR FINE GRANULARITY MEMORY SPARING                                                                           |
| 83680989     | Published   |               | 4/19/2011   |            | 11864027.5 EP      | EP | SCHEDULING MAP AND REDUCE TASKS FOR JOBS FOR EXECUTION ACCORDING TO PERFORMANCE GOALS                                             |
| 83681479     | Allowed     |               | 3/21/2011   |            | 11861390 EP        | EP | DATA BACKUP PRIORITIZATION                                                                                                        |
| 83692281     | Application |               | 10/31/2013  |            | 13306496.4 EP      | EP | METHODS TO UPDATE PORTALS                                                                                                         |
| 83699841     | Published   |               | 10/31/2011  |            | 11866959.7 EP      | EP | NETWORK ASSET INFORMATION MANAGEMENT                                                                                              |
| 83700262     | Published   |               | 7/25/2011   |            | 11870090.5 EP      | EP | Transferring a Conference Session Between Conference Servers Due to Failure                                                       |
| 83701130     | Published   |               | 10/14/2011  |            | 11874029.9 EP      | EP | PERFORMING A REPLICATION OPERATION IN RESPONSE TO MOVEMENT OF A VIRTUAL DATA CONTAINER                                            |
| 83714208     | Published   |               | 5/31/2011   |            | 11866677.5 EP      | EP | APPLICATION SECURITY TESTING                                                                                                      |
| 83721252     | Published   |               | 6/3/2011    |            | 11866517.3 EP      | EP | RATING ITEMS                                                                                                                      |
| 83730049     | Published   |               | 7/30/2011   |            | 11741391.4 EP      | EP | SIDEWAYS INFORMATION PASSING                                                                                                      |
| 83731365     | Application |               | 6/14/2011   |            | 11867933.1 EP      | EP | DEDUPLICATION IN DISTRIBUTED FILE SYSTEMS                                                                                         |
| 83731892     | Published   |               | 5/27/2011   |            | 11866770.8 EP      | EP | TRANSACTION GATEWAY                                                                                                               |
| 83733020     | Published   |               | 8/8/2011    |            | 11870810.6 EP      | EP | Fabric Chip Having Trunked Links                                                                                                  |
| 83735421     | Published   |               | 6/28/2011   |            | 11868835.7 EP      | EP | SHIFTABLE MEMORY                                                                                                                  |
| 83766021     | Published   |               | 10/31/2011  |            | 11875125.4 EP      | EP | IMPLEMENTING AN ENERGY PROPORTIONAL NETWORK ARCHITECTURE FROM DESIRED NETWORK CRITERIA                                            |
| 83769027     | Published   |               | 7/27/2011   |            | 11870039.2 EP      | EP | Efficient Data-Storage Devices that Include Memory Elements Characterized by Potentially Large Switching Latencies                |
| 83769075     | Published   |               | 7/27/2011   |            | 11869906.5 EP      | EP | Method and System for Reducing Write-Buffer Capacities within Memristor-Based Data-Storage Devices                                |
| 83769098     | Published   |               | 7/11/2011   |            | 11869198.9 EP      | EP | VIRTUAL MACHINE PLACEMENT                                                                                                         |
| 83778739     | Published   |               | 7/1/2011    |            | 11869103.9 EP      | EP | METHOD OF AND SYSTEM FOR MANAGING COMPUTING RESOURCES                                                                             |
| 83783393     | Application |               | 7/27/2011   |            | 11870148.1 EP      | EP | MAINTAINING AND UTILIZING A REPORT KNOWLEDGEBASE                                                                                  |
| 83783995     | Published   |               | 7/12/2011   |            | 11869201.1 EP      | EP | AUDIO SAMPLE                                                                                                                      |
| 83784112     | Published   |               | 10/20/2011  |            | 11872086.1 EP      | EP | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS BASED ON A REFERENCE BASELINE ACCORDING TO TEMPORAL POSITION IN A SEQUENCE OF EVENTS |
| 83786522     | Published   |               | 7/22/2011   |            | 11870141.6 EP      | EP | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                                                           |
| 83786717     | Published   |               | 12/13/2011  |            | 11877577.4 EP      | EP | STORAGE CONTROLLER WITH HOST COLLABORATION FOR INITIALIZATION OF A LOGICAL VOLUME                                                 |

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| 83787661     | Published   |               | 8/1/2012    |            | 12819296           | EP | ASSET MODEL IMPORT CONNECTOR                                                                   |
| 83791157     | Published   |               | 7/29/2011   |            | 11870354.5         | EP | OPTICAL POWER SPLITTERS                                                                        |
| 83793407     | Published   |               | 9/28/2011   |            | 11873283.3         | EP | IMPLEMENTING A SWITCH FABRIC RESPONSIVE TO AN UNAVAILABLE PATH                                 |
| 83793438     | Published   |               | 9/28/2011   |            | 11872965.6         | EP | MANAGING A SWITCH FABRIC                                                                       |
| 83799684     | Application |               | 7/31/2011   |            | 11870431.1         | EP | INCIDENT HANDLING                                                                              |
| 83806241     | Published   |               | 9/7/2012    |            | 12830781.6         | EP | VISUAL COMPONENT AND DRILL DOWN MAPPING                                                        |
| 83806359     | Published   |               | 1/31/2014   |            | 14290022.4         | EP | DISPLAYING A DASHBOARD BASED ON CONSTRAINTS OF A USER DEVICE                                   |
| 83810410     | Published   |               | 8/17/2011   |            | 11870999.7         | EP | TRACING DATA BLOCK OPERATIONS                                                                  |
| 83815233     | Published   |               | 8/26/2011   |            | 11871717.2         | EP | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                        |
| 83816832     | Published   |               | 11/2/2011   |            | 11874975.3         | EP | METHOD OF SEARCHING AND GENERATING A RELEVANT SEARCH STRING                                    |
| 83817966     | Published   |               | 11/18/2011  |            | 11875745.9         | EP | QUERY SUMMARY GENERATION USING ROW-COLUMN DATA STORAGE                                         |
| 83820425     | Published   |               | 2/24/2014   |            | 14305256.1         | EP | PROVIDING POLICY INFORMATION                                                                   |
| 83821210     | Published   |               | 8/31/2011   |            | 11871599.4         | EP | MULTIMODE FIBER FOR MODULATABLE SOURCE                                                         |
| 83822514     | Application |               | 3/24/2014   |            | 14305421.1         | EP | WEB APPLICATION LAUNCH APPLICATION PROGRAMMING INTERFACE                                       |
| 83832710     | Published   |               | 12/2/2011   |            | 11876552.8         | EP | Topic Extraction And Video Association                                                         |
| 83834199     | Published   |               | 9/2/2011    |            | 11871484.9         | EP | APPARATUS TO STORE DATA AND METHODS TO READ MEMORY CELLS                                       |
| 83834205     | Published   |               | 4/10/2010   |            | 14157058           | EP | INJECTION OF DATA INTO A SOFTWARE APPLICATION                                                  |
| 83835753     | Published   |               | 9/6/2011    |            | 11872062.2         | EP | MECHANICALLY ALIGNED OPTICAL ENGINE                                                            |
| 83852053     | Published   |               | 9/30/2011   |            | 11873381.5         | EP | OPTICAL POWER SPLITTER INCLUDING A ZIG-ZAG                                                     |
| 83854666     | Published   |               | 9/30/2011   |            | 11873379.9         | EP | EXTENDING A CONVERSATION ACROSS APPLICATIONS                                                   |
| 83857912     | Published   |               | 10/12/2011  |            | 11874063.8         | EP | SELECT DEVICE FOR CROSS POINT MEMORY STRUCTURES                                                |
| 83862108     | Published   |               | 10/28/2011  |            | 11874593.4         | EP | METAL-INSULATOR PHASE TRANSITION FLIP-FLOP                                                     |
| 83862165     | Published   |               | 11/1/2011   |            | 11875113           | EP | DIRECT MODULATED LASER                                                                         |
| 83862743     | Application |               | 10/7/2011   |            | 11873708.9         | EP | MAPPING PERSISTENT STORAGE                                                                     |
| 83862998     | Application |               | 10/10/2011  |            | 11873859           | EP | METHODS AND SYSTEMS FOR IDENTIFYING ACTION FOR RESPONDING TO ANOMALY IN CLOUD COMPUTING SYSTEM |
| 83863044     | Application |               | 11/4/2011   |            | 11874998.5         | EP | DECODER CIRCUITS HAVING METAL-INSULATOR-METAL THRESHOLD SWITCHES                               |
| 83863453     | Application |               | 1/6/2012    |            | 12864664.3         | EP | WIRELESS ACCESS POINT ASSIGNMENT                                                               |
| 83875490     | Published   |               | 10/27/2011  |            | 11874746.8         | EP | SHIFTABLE MEMORY SUPPORTING ATOMIC OPERATION                                                   |

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| 83883797     | Application |               | 10/10/2011  |            | 11873977 EP        | EP | Methods And Systems For Planning Execution Of An Application In A Cloud Computing System      |
| 83928319     | Application |               | 10/31/2011  |            | 11874903.5 EP      | EP | Reducing TCP Timeouts due to Incast Collapse at a Network Switch                              |
| 83929405     | Published   |               | 10/31/2011  |            | 11875179.1 EP      | EP | REMOTE SOFTWARE DEPLOYMENT ACROSS A NETWORK                                                   |
| 83929654     | Published   |               | 12/17/2011  |            | 11877247.4 EP      | EP | Determining Rack Position of Device                                                           |
| 83930298     | Published   |               | 12/9/2011   |            | 11879168 EP        | EP | Optical Connections                                                                           |
| 83933540     | Published   |               | 10/27/2011  |            | 11874849 EP        | EP | Aligning Annotation of Fields of Documents                                                    |
| 83933604     | Published   |               | 10/31/2011  |            | 11874908.4 EP      | EP | EMAIL TAGS                                                                                    |
| 83946421     | Published   |               | 3/8/2012    |            | 12870678.5 EP      | EP | DATA SAMPLING DEDUPLICATION                                                                   |
| 83946487     | Published   |               | 4/27/2012   |            | 12875136.9 EP      | EP | COLLABORATIVE CACHING                                                                         |
| 83948709     | Published   |               | 1/9/2012    |            | 12865204.7 EP      | EP | Optical Connections                                                                           |
| 83948829     | Published   |               | 1/12/2012   |            | 12864761.7 EP      | EP | INTEGRATED SUB-WAVELENGTH GRATING SYSTEM                                                      |
| 83951308     | Published   |               | 2/22/2012   |            | 12869527.7 EP      | EP | MULTIPLEXER FOR SIGNALS ACCORDING TO DIFFERENT PROTOCOLS                                      |
| 83951471     | Published   |               | 1/18/2012   |            | 12866321.8 EP      | EP | HIGH DENSITY LASER OPTICS                                                                     |
| 83951531     | Published   |               | 1/27/2012   |            | 12866666.6 EP      | EP | Glass-Silicon Wafer-Stacked Opto-Electronic Platforms                                         |
| 83952192     | Published   |               | 4/30/2012   |            | 12875929.7 EP      | EP | PREVENTING A HYBRID MEMORY MODULE FROM BEING MAPPED                                           |
| 83952330     | Published   |               | 3/15/2012   |            | 12871109 EP        | EP | Accessing And Replicating Backup Data Objects                                                 |
| 83958117     | Application |               | 8/14/2014   |            | 14306276.8 EP      | EP | CORRELATION ENGINE COMPRISING ROOT CAUSE AND SERVICE IMPACT ANALYSES                          |
| 83959810     | Published   |               | 1/31/2012   |            | 12867223.5 EP      | EP | COMBINATION UNDERFILL-DAM AND ELECTRICAL-INTERCONNECT STRUCTURE FOR AN OPTO-ELECTRONIC ENGINE |
| 83959946     | Published   |               | 1/31/2012   |            | 12867225 EP        | EP | APPARATUS FOR USE IN OPTOELECTRONICS                                                          |
| 83964312     | Published   |               | 1/25/2012   |            | 12866488.5 EP      | EP | STORAGE SYSTEM DEVICE MANAGEMENT                                                              |
| 83969750     | Published   |               | 3/30/2012   |            | 12872471.3 EP      | EP | AUTHORIZATION CACHE                                                                           |
| 83974288     | Published   |               | 1/30/2012   |            | 12867204.5 EP      | EP | ESTABLISHING CONNECTIVITY OF MODULAR NODES IN A PRE-BOOT ENVIRONMENT                          |
| 83985635     | Published   |               | 2/21/2012   |            | 12869329.8 EP      | EP | MAINTAINING SYSTEM FIRMWARE IMAGES REMOTELY USING A DISTRIBUTE FILE SYSTEM PROTOCOL           |
| 83987008     | Published   |               | 2/29/2012   |            | 12870271.9 EP      | EP | UNIDIRECTIONAL RING LASERS                                                                    |
| 83988357     | Published   |               | 4/24/2012   |            | 12875065 EP        | EP | IDENTIFYING NETWORK COMMUNICATION PATTERNS                                                    |
| 83991310     | Published   |               | 3/2/2012    |            | 12869720.8 EP      | EP | VERSIONED MEMORIES USING A MULTI-LEVEL CELL                                                   |
| 83991356     | Application |               | 1/27/2012   |            | 12866955.3 EP      | EP | INTELLIGENT EDGE DEVICE                                                                       |
| 83991382     | Published   |               | 1/31/2012   |            | 12867028.8 EP      | EP | DETERMINATION OF SPOOFING OF A UNIQUE MACHINE IDENTIFIER                                      |

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| 83991440     | Published    |               | 4/30/2012   |            | 12875912.3 EP      | EP | NETWORK ACCESS APPARATUS HAVING A CONTROL MODULE AND A NETWORK ACCESS MODULE      |
| 83991565     | Published    |               | 4/27/2012   |            | 12875252.4 EP      | EP | LOCAL CHECKPOINTING USING A MULTI-LEVEL CELL                                      |
| 83991603     | Application  |               | 1/26/2012   |            | 12866445.5 EP      | EP | IMAGE-BASED APPLICATION AUTOMATION                                                |
| 83991625     | Published    |               | 2/27/2012   |            | 12870159.6 EP      | EP | METHOD AND SYSTEM FOR VEHICLE PERSONALIZATION                                     |
| 83991697     | Application  |               | 1/26/2012   |            | 12866909 EP        | EP | IMAGE-BASED APPLICATION AUTOMATION                                                |
| 83991734     | Published    |               | 1/29/2012   |            | 12866701.1 EP      | EP | BEST-DEAL LIST GENERATION                                                         |
| 83992341     | Published    |               | 4/11/2012   |            | 12874138.6 EP      | EP | ROUTING OPTICAL SIGNALS                                                           |
| 83992633     | Application  |               | 1/31/2012   |            | 12867306.8 EP      | EP | CONTINUOUS DEPLOYMENT OF CODE CHANGES                                             |
| 83992771     | Published    |               | 4/25/2012   |            | 12875444.7 EP      | EP | FILE TRANSFER USING XML                                                           |
| 83992802     | Acknowledged |               | 5/15/2015   |            | 12889665.1 EP      | EP | BINDING OF APPLICATION AND INFRASTRUCTURE BLUEPRINTS                              |
| 83992842     | Application  |               | 4/23/2012   |            | 12875367 EP        | EP | INFLUENCE SCORES FOR SOCIAL MEDIA PROFILES                                        |
| 83995338     | Published    |               | 4/30/2012   |            | 12875780.4 EP      | EP | BLOCK LEVEL STORAGE                                                               |
| 83995429     | Published    |               | 4/9/2012    |            | 12874325.9 EP      | EP | CREATING AN ARCHIVAL MODEL                                                        |
| 83995625     | Application  |               | 4/21/2012   |            | 12875160.9 EP      | EP | MAPPING APPLICATION DEPENDENCIES AT RUNTIME                                       |
| 83996289     | Published    |               | 4/30/2012   |            | 12875739 EP        | EP | OBJECT DEPENDENCY MANAGEMENT                                                      |
| 83996346     | Published    |               | 4/26/2012   |            | 12875130.2 EP      | EP | INCREASING A DATA TRANSFER RATE                                                   |
| 84014754     | Application  |               | 6/29/2012   |            | 12880021.6 EP      | EP | RULE-BASED AUTOMATED TEST DATA GENERATION                                         |
| 84017517     | Published    |               | 2/29/2012   |            | 12870087.9 EP      | EP | CONTROL OF FREQUENCY CHANNEL BETWEEN WIRELESS ACCESS POINTS ACCORDING TO SEQUENCE |
| 84017562     | Published    |               | 3/26/2012   |            | 12873087.6 EP      | EP | FRAME PASSING BASED ON ETHERTYPE                                                  |
| 84020488     | Published    |               | 4/25/2012   |            | 12875510.5 EP      | EP | NONLINEAR MEMRISTORS                                                              |
| 84020533     | Published    |               | 4/30/2012   |            | 12875835.6 EP      | EP | HYBRID MOS OPTICAL MODULATOR                                                      |
| 84020622     | Published    |               | 7/30/2012   |            | 12874891 EP        | EP | VIRTUAL COMPUTING RESOURCE ORCHESTRATION                                          |
| 84031233     | Application  |               | 10/29/2014  |            | 14306728.8 EP      | EP | PROVIDING DATA FROM DATA SOURCES                                                  |
| 84037075     | Application  |               | 3/8/2012    |            | 12870625.6 EP      | EP | MODIFYING VIRTUAL MACHINE COMMUNICATIONS                                          |
| 84038223     | Published    |               | 5/30/2012   |            | 12877746.3 EP      | EP | PARAMETER ADJUSTMENT FOR PATTERN DISCOVERY                                        |
| 84043276     | Application  |               | 11/26/2014  |            | 14306890.6 EP      | EP | WEB BROWSER EMULATOR                                                              |
| 84046856     | Published    |               | 3/30/2012   |            | 12872611.4 EP      | EP | ASSOCIATING AN APPLICATION WITH AN APPLICATION FILE                               |
| 84049813     | Application  |               | 3/14/2012   |            | 12871431.8 EP      | EP | REPLACEABLE MODULAR OPTICAL CONNECTION ASSEMBLY                                   |
| 84049830     | Published    |               | 3/14/2012   |            | 12870972.2 EP      | EP | Allocating Bandwidth in a Network                                                 |
| 84071978     | Application  |               | 6/8/2012    |            | 12878477.4 EP      | EP | VERSION MANAGEMENT FOR APPLICATIONS                                               |
| 84072891     | Application  |               | 7/16/2012   |            | 12881266.6 EP      | EP | WORKFLOW COMPILATION                                                              |
| 84072957     | Published    |               | 6/8/2012    |            | 12878487.3 EP      | EP | REPLACING A CHUNK OF DATA WITH A REFERENCE TO A LOCATION                          |
| 84072994     | Application  |               | 7/31/2012   |            | 12882458.8 EP      | EP | Supporting Multi-Tenancy in a Federated Data Management System                    |

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| 84073059     | Published   |               | 7/31/2012   |            |                    | EP | Constructing test-centric model of application                                                                                                        |
| 84074285     | Published   |               | 5/30/2012   |            | 12877932.9 EP      | EP | SERVER PROFILE TEMPLATES                                                                                                                              |
| 84075965     | Published   |               | 7/27/2012   |            | 12881788.9 EP      | EP | SYSTEMS AND METHODS FOR DETECTING A DIMM SEATING ERROR                                                                                                |
| 84076326     | Published   |               | 7/20/2012   |            | 12881312.8 EP      | EP | MIGRATING APPLICATIONS BETWEEN NETWORKS                                                                                                               |
| 84076343     | Application |               | 6/25/2012   |            | 12879622.4 EP      | EP | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                                                                                            |
| 84077513     | Published   |               | 7/30/2012   |            | 12882164.2 EP      | EP | PROVIDER BRIDGED NETWORK COMMUNICATION                                                                                                                |
| 84077596     | Published   |               | 7/31/2012   |            | 12882261.6 EP      | EP | SYSTEM ARCHITECTURE GENERATION                                                                                                                        |
| 84077608     | Published   |               | 7/31/2012   |            | 12882152.7 EP      | EP | MANAGING AN INTERFACE BETWEEN AN APPLICATION AND A NETWORK                                                                                            |
| 84077645     | Published   |               | 7/20/2012   |            | 12881503.2 EP      | EP | POLICY-BASED SCALING OF NETWORK RESOURCES                                                                                                             |
| 84077685     | Published   |               | 7/31/2012   |            | 12882465.3 EP      | EP | GENERATING SERVICE REQUEST MESSAGE TO OBTAIN WIRELESS SERVICES USING A MINIMAL SET OF SERVICES THAT ARE DESIGNATED BY DEFAULT FOR A ROAMING CONDITION |
|              |             |               |             |            |                    |    |                                                                                                                                                       |
| 84077877     | Published   |               | 7/10/2012   |            | 12880743.5 EP      | EP | LIST SORT STATIC RANDOM ACCESS MEMORY                                                                                                                 |
| 84078885     | Published   |               | 6/8/2012    |            | 12878542.5 EP      | EP | PATIENT INFORMATION INTERFACE                                                                                                                         |
| 84079509     | Published   |               | 7/25/2012   |            | 12881603 EP        | EP | DETERMINING APPLICATION VULNERABILITIES                                                                                                               |
| 84079534     | Published   |               | 7/26/2012   |            | 12881886.1 EP      | EP | APPLICATION SECURITY TESTING                                                                                                                          |
| 84079552     | Published   |               | 5/31/2012   |            | 12877909.7 EP      | EP | ESTABLISHING TRUST BETWEEN PROCESSOR AND SERVER                                                                                                       |
| 84079594     | Published   |               | 5/15/2012   |            | 12876711.8 EP      | EP | QUERY PROCESSING                                                                                                                                      |
| 84080533     | Published   |               | 7/31/2012   |            | 12882473.7 EP      | EP | RECEIVING INPUT POWER MEASUREMENTS TO MANAGE A RECTIFIER                                                                                              |
| 84080808     | Published   |               | 4/30/2012   |            | 12875809.1 EP      | EP | Determining Virtual Machine Placement                                                                                                                 |
| 84084131     | Published   |               | 4/25/2012   |            | 12874965.2 EP      | EP | DYNAMIC MEMORY ALLOCATION                                                                                                                             |
| 84084214     | Published   |               | 4/30/2012   |            | EP12875848.9 EP    | EP | Globally managed rate-limit assignment for multi-tenant segregation using distributed rate limiters                                                   |
| 84086247     | Application |               | 6/29/2012   |            | 12880264.2 EP      | EP | Wireless Network with Coordinated Sectors to Mitigate Interference                                                                                    |
| 84094531     | Published   |               | 8/29/2012   |            | 12 883 723.4 EP    | EP | CIRCUIT-SWITCHED CALL DELIVERY                                                                                                                        |
| 84094653     | Application |               | 5/1/2012    |            | 12876066.7 EP      | EP | CONFIGURABLE CLOS NETWORK                                                                                                                             |
| 84097630     | Application |               | 10/31/2014  |            | 14306752.8 EP      | EP | Silicon Photonics based optical circuit switch                                                                                                        |
| 84100733     | Application |               | 6/30/2012   |            | 12 880 133.9 EP    | EP | SYSTEM AND METHOD FOR VIRTUAL REPLICATION OF A MOBILE PHONE                                                                                           |
| 84100831     | Published   |               | 5/11/2012   |            | 12876432.1 EP      | EP | SERVER SELECTION                                                                                                                                      |
| 84101323     | Published   |               | 5/25/2012   |            | 12877499.9 EP      | EP | PROVIDING A MODEL OF IMPACT OF A COOLING INFRASTRUCTURE                                                                                               |
| 84106332     | Published   |               | 6/29/2012   |            | 12880122.2 EP      | EP | GENERATION OF ACCESS POINT CONFIGURATION CHANGE BASED ON A GENERATED COVERAGE MONITOR                                                                 |

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| 84106350     | Published   |               | 6/27/2012   |            | 12880028.1 EP      |    | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                                                                             |
| 84107976     | Application |               | 11/14/2014  |            | 14 306 814.6 EP    |    | DYNAMICALLY ADJUSTING A MODEL FOR A SECURITY OPERATIONS CENTER                                                          |
| 84110996     | Published   |               | 7/27/2012   |            | 12881726.9 EP      |    | STORING MEMORY WITH NEGATIVE DIFFERENTIAL RESISTANCE MATERIAL                                                           |
| 84112922     | Published   |               | 7/30/2012   |            | 12882147.7 EP      |    | OPTICAL WAVEGUIDE                                                                                                       |
| 84116402     | Published   |               | 6/1/2012    |            | 12878169.7 EP      |    | SHARING INFORMATION ABOUT RESOURCES IN A COLLABORATIVE ENVIRONMENT                                                      |
| 84117619     | Application |               | 6/29/2012   |            | 12879840.2 EP      |    | PERSONALIZING SHARED COLLABORATION CONTENT                                                                              |
| 84118238     | Published   |               | 6/28/2012   |            | 12880177.6 EP      |    | Multi-Level Cell Memory                                                                                                 |
| 84118578     | Published   |               | 7/3/2012    |            | 12880628.8 EP      |    | MANAGING A CLOUD SERVICE                                                                                                |
| 84118612     | Published   |               | 7/3/2012    |            | 12880717.9 EP      |    | MANAGING A HYBRID CLOUD SERVICE                                                                                         |
| 84118664     | Published   |               | 7/3/2012    |            | 12880390.5 EP      |    | MANAGING A MULTITENANT CLOUD SERVICE                                                                                    |
| 84123198     | Published   |               | 7/31/2012   |            | 12882154.3 EP      |    | ABSTRACTION MODELS FOR MONITORING OF CLOUD RESOURCES                                                                    |
| 84126206     | Published   |               | 7/9/2012    |            | 12880952.2 EP      |    | SITE MODEL SELECTION FOR A WIRELESS ACCESS POINT                                                                        |
| 84126495     | Published   |               | 7/17/2012   |            | 12881354 EP        |    | SYSTEM AND METHOD FOR OPERATING SYSTEM AGNOSTIC HARDWARE VALIDATION                                                     |
| 84126787     | Application |               | 1/31/2013   |            | 13873375.3 EP      |    | MAGNETIC TAPE PROCESSING                                                                                                |
| 84137061     | Published   |               | 7/31/2012   |            | 12882206.1 EP      |    | SYSTEMS AND METHODS FOR CONTROLLING ACCESS TO A SHARED DATA STRUCTURE WITH READER-WRITER LOCKS USING MULTIPLE SUB-LOCKS |
| 84137295     | Published   |               | 10/10/2012  |            | 12886202.6 EP      |    | IDENTIFYING REPORTS TO ADDRESS NETWORK ISSUES                                                                           |
| 84138269     | Published   |               | 7/30/2012   |            | 12882428.1 EP      |    | COMPIRATION SYSTEM FOR EXECUTABLE OBJECTS                                                                               |
| 84139614     | Application |               | 10/31/2012  |            | 12887324.7 EP      |    | EXECUTABLE SOFTWARE SPECIFICATION GENERATION                                                                            |
| 84139963     | Application |               | 9/27/2012   |            | 12885444.5 EP      |    | CAPTURING AN APPLICATION STATE IN A CONVERSATION                                                                        |
| 84140104     | Published   |               | 10/30/2012  |            | 1288772.7 EP       |    | ANALYZING DATA WITH COMPUTER VISION                                                                                     |
| 84140132     | Published   |               | 10/31/2012  |            | 12887808.9 EP      |    | Combined Block-Style Error Correction                                                                                   |
| 84140147     | Published   |               | 10/30/2012  |            | 12887594.5 EP      |    | SMART MEMORY BUFFERS                                                                                                    |
| 84140879     | Published   |               | 9/6/2012    |            | 12884030.3 EP      |    | Scalable File System                                                                                                    |
| 84141088     | Published   |               | 9/10/2012   |            | 12884306.7 EP      |    | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                                          |
| 84141157     | Published   |               | 10/31/2012  |            | 12887476.5 EP      |    | CATALOGING BACKUP DATA                                                                                                  |
| 84141197     | Application |               | 12/19/2012  |            | 12890441.4 EP      |    | NVRAM PATH SELECTION                                                                                                    |
| 84141280     | Application |               | 1/21/2013   |            | 13871841.6 EP      |    | PALETTIZED LOAD REACTANT REGULATION HEATING                                                                             |
| 84141292     | Published   |               | 7/31/2012   |            | 12882513 EP        |    | Pattern Consolidation To Identify Malicious Activity                                                                    |
| 84141335     | Application |               | 12/21/2012  |            | 12890251.7 EP      |    | MEMORY MODULE HAVING ERROR CORRECTION LOGIC                                                                             |
| 84153339     | Published   |               | 7/31/2012   |            | 12882340.8 EP      |    | UNAUTHORIZED USER CLASSIFICATION                                                                                        |

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| 84156159     | Published   |               | 8/29/2012   |            | 12883884.4 EP      | EP | Querying Structured And Unstructured Databases                                |
| 84158938     | Published   |               | 8/28/2012   |            | 12883648.3 EP      | EP | HIGH PERFORMANCE PERSISTENT MEMORY                                            |
| 84159545     | Application |               | 1/31/2013   |            | 13874118.6 EP      | EP | CONTROLLED HEAT DELIVERY                                                      |
| 84160124     | Published   |               | 8/16/2013   |            | 13832360.5 EP      | EP | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                              |
| 84162671     | Published   |               | 8/29/2012   |            | 12883502.2 EP      | EP | SECURITY SCAN BASED ON DYNAMIC TAINT                                          |
| 84164229     | Application |               | 3/18/2013   |            | 13838535.6 EP      | EP | VISUALIZING CONDITIONS OF INFORMATION TECHNOLOGY ENVIRONMENTS                 |
| 84164254     | Application |               | 9/19/2012   |            | 12883040.3 EP      | EP | METADATA TREE OF A PATIENT WITH LOCKBOXES                                     |
| 84168250     | Application |               | 8/21/2012   |            | 12883129.4 EP      | EP | CONGESTION NOTIFICATION IN A NETWORK                                          |
| 84173795     | Published   |               | 9/28/2012   |            | 12885741.4 EP      | EP | LOCATION BASED ADVERTISING                                                    |
| 84179609     | Published   |               | 8/31/2012   |            | 12883899.2 EP      | EP | SELECTING A RESOURCE TO BE USED IN A DATA BACKUP OR RESTORE OPERATION         |
| 84182204     | Published   |               | 9/28/2012   |            | 12885510.3 EP      | EP | Application Security Testing                                                  |
| 84184512     | Published   |               | 9/27/2012   |            | 12885196.1 EP      | EP | TRANSMIT SPECIFIC TRAFFIC ALONG BLOCKED LINK                                  |
| 84185033     | Published   |               | 9/14/2012   |            | 12884359.6 EP      | EP | DETERMINING A LOAD DISTRIBUTION FOR DATA UNITS AT A PACKET INSPECTION DEVICE  |
| 84191740     | Application |               | 9/25/2012   |            | 12885193.8 EP      | EP | NOTIFICATION OF ADDRESS RANGE INCLUDING NON-CORRECTABLE ERROR                 |
| 84192678     | Application |               | 10/31/2012  |            | E12887787.5 EP     | EP | MODULAR RACK SYSTEM                                                           |
| 84193763     | Application |               | 1/18/2013   |            | 13871450.6 EP      | EP | INTERCONNECTION ARCHITECTURE FOR MULTILAYER CIRCUITS                          |
| 84195008     | Application |               | 1/28/2013   |            | 13872449.7 EP      | EP | RADIUSED ALIGNMENT POST FOR SUBSTRATE MATERIAL                                |
| 84196700     | Published   |               | 9/28/2012   |            | 12885210 EP        | EP | APPLICATION RANDOMIZATION                                                     |
| 84198283     | Application |               | 11/23/2012  |            | 12885657.2 EP      | EP | Dynamic Management Of A Cloud Computing Infrastructure                        |
| 84215509     | Application |               | 4/30/2013   |            | 13883838.8 EP      | EP | GROUPING CHUNKS OF DATA INTO A COMPRESSION REGION                             |
| 84215523     | Application |               | 3/28/2013   |            |                    | EP | DATA FLUSH OF GROUP TABLE                                                     |
| 84215535     | Application |               | 3/28/2013   |            | 13879713.9 EP      | EP | ADDRESS RANGE TRANSFER FROM FIRST NODE TO SECOND NODE                         |
| 84217905     | Published   |               | 10/19/2012  |            | 12886518.5 EP      | EP | ASYNCRHONOUS CONSISTENT SNAPSHOTS IN PERSISTENT MEMORY STORES                 |
| 84217962     | Published   |               | 11/14/2012  |            | 12888283.4 EP      | EP | Updating Statistics in Distributed Databases                                  |
| 84223043     | Application |               | 10/19/2012  |            | 12886565.6 EP      | EP | Performing A Search Based On Entity-Related Criteria                          |
| 84223933     | Application |               | 6/2/2015    |            | 13881439.7 EP      | EP | SATA INITIATOR ADDRESSING AND STORAGE DEVICE SLICING                          |
| 84224873     | Application |               | 3/28/2013   |            | 13879729.5 EP      | EP | COORDINATING REPLICATION OF DATA STORED IN A NON-VOLATILE MEMORY-BASED SYSTEM |

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| 84226550     | Published    |               | 10/26/2012  |            | 12886958.3 EP      | EP | PRODUCT INTELLIGENCE ENGINE                                                                           |
| 84237773     | Application  |               | 5/5/2015    |            | 12887799 EP        | EP | Patient oriented hospital care approach and system                                                    |
| 84237916     | Application  |               | 5/5/2015    |            | 12887326.2 EP      | EP | GENERATING AN OUTPUT BASED ON COLLECTING INFORMATION RELATING TO A CASE                               |
| 84245419     | Application  |               | 11/19/2012  |            | 12888596.9 EP      | EP | ELECTRICAL CONNECTORS FOR POWER SUPPLIES                                                              |
| 84252609     | Acknowledged |               | 6/1/2015    |            | 12889521.6 EP      | EP | ASYNCHRONOUS FRAMEWORK FOR MANAGEMENT OF RESOURCES                                                    |
| 84252652     | Application  |               | 12/19/2012  |            | 12890336.6 EP      | EP | MULTI-CHANNEL CONVERSATION                                                                            |
| 84264437     | Application  |               | 11/29/2012  |            | 12889279.1 EP      | EP | Image Analysis                                                                                        |
| 84265739     | Published    |               | 11/30/2012  |            | 12889263.5 EP      | EP | Distributed Pattern Discovery                                                                         |
| 84273643     | Application  |               | 12/7/2012   |            | 12889689.1 EP      | EP | CREATING MULTIMODAL OBJECTS OF USER RESPONSES TO MEDIA                                                |
| 84274035     | Published    |               | 6/4/2015    |            | 12889605.7 EP      | EP | Displaying Information Technology Conditions with Heat Maps                                           |
| 84275145     | Acknowledged |               | 12/19/2012  |            | 12890444.8 EP      | EP | HEAT REMOVAL ASSEMBLY                                                                                 |
| 84291321     | Application  |               | 1/21/2013   |            | 13871412.6 EP      | EP | POWER FACTOR CORRECTOR POWER SHARING                                                                  |
| 84291336     | Acknowledged |               | 1/29/2013   |            |                    | EP | ASSIGNING PROCESSORS TO MEMORY MAPPED CONFIGURATION                                                   |
| 84292962     | Application  |               | 1/31/2013   |            | 13873374.6 EP      | EP | UPDATING A COMMIT LIST TO INDICATE DATA TO BE WRITTEN TO A FIRMWARE INTERFACE VARIABLE REPOSITORY     |
|              |              |               |             |            |                    |    |                                                                                                       |
| 84299276     | Application  |               | 4/29/2013   |            | 13883570.7 EP      | EP | RECORDING UNSTRUCTURED EVENTS IN CONTEXT                                                              |
| 84301892     | Application  |               | 3/28/2013   |            | 13879778.2 EP      | EP | Implementing Coherency with Reflective Memory                                                         |
| 84301953     | Application  |               | 3/28/2013   |            | 13880647.6 EP      | EP | APPARATUS AND METHOD FOR STORAGE DEVICE READING                                                       |
| 84304242     | Application  |               | 2/26/2013   |            | 13876278.6 EP      | EP | FEDERATED SOCIAL MEDIA ANALYSIS SYSTEM AND METHOD THEREOF                                             |
| 84304266     | Application  |               | 5/28/2013   |            | 13885828.7 EP      | EP | MOBILE AUGMENTED REALITY FOR MANAGING ENCLOSED AREAS                                                  |
| 84304374     | Application  |               | 7/9/2015    |            | 13870798.9 EP      | EP | Characterizing Risks in Resource Distribution Systems                                                 |
| 84304385     | Application  |               | 7/10/2015   |            | 13871522.2 EP      | EP | Vertically-Tiered Client-Server Architecture                                                          |
| 84304455     | Application  |               | 7/10/2015   |            | 13874163.2 EP      | EP | NON-VOLATILE MULTI-LEVEL-CELL MEMORY WITH DECOUPLED BITS FOR HIGHER PERFORMANCE AND ENERGY EFFICIENCY |
| 84306364     | Application  |               | 7/20/2015   |            | 13872566.8 EP      | EP | BARCODE DEVICE                                                                                        |
| 84306418     | Acknowledged |               | 2/28/2013   |            | 13876588.8 EP      | EP | THREE-PHASE PARALLEL POWER CONVERTER LOAD ADJUSTMENT                                                  |
| 84310698     | Application  |               | 7/24/2015   |            | 13713494.6 EP      | EP | PREDICTIVE CACHE APPARATUS AND METHOD OF CACHE PREDICTION                                             |
| 84312500     | Application  |               | 7/30/2015   |            | 13876146.5 EP      | EP | Sending a Request to a Management Service                                                             |

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| 84312667     | Application  |               | 1/18/2013   |            | 13871895.2         | EP | PREVENTING AN INPUT/OUTPUT BLOCKING ATTACK TO WIRELESS ACCESS POINT                                           |
| 84312773     | Application  |               | 1/29/2013   |            | 13874102           | EP | ANALYZING STRUCTURE OF WEB APPLICATION                                                                        |
| 84312942     | Application  |               | 7/17/2015   |            | 13876148.1         | EP | PROVIDING CODE CHANGE JOB SETS OF DIFFERENT SIZES TO VALIDATORS                                               |
| 84312973     | Application  |               | 7/24/2015   |            | 13881066.8         | EP | EXPLORATION MAPS FOR VISUALIZING SOFTWARE PROJECT KNOWLEDGE                                                   |
| 90001175     | Application  |               | 2/27/2013   |            | 13876359.4         | EP | DETERMINING EVENT AND INPUT COVERAGE METRICS FOR GRAPHICAL USER INTERFACE CONTROL INSTANCE                    |
| 90016455     | Application  |               | 1/24/2013   |            | 13873068.4         | EP | Address Resolution In Software-Defined Networks                                                               |
| 90017108     | Application  |               | 1/30/2013   |            | 13873958.6         | EP | CONTROLLING A TOPOLOGY OF A NETWORK                                                                           |
| 90017162     | Application  |               | 1/31/2013   |            | 13874117.8         | EP | NETWORK CONTROLLER PROVISIONED MACSEC KEYS                                                                    |
| 90022852     | Application  |               | 8/7/2015    |            | 13874644.1         | EP | Formatting Semi-Structured Data in a Database                                                                 |
| 90025969     | Application  |               | 3/28/2013   |            | 13879854.1         | EP | Shared Memory System                                                                                          |
| 90028906     | Application  |               | 4/1/2013    |            | 13881361.3         | EP | External Memory Controller                                                                                    |
| 90028918     | Application  |               | 4/2/2013    |            | 13881264.9         | EP | STATE-RETAINING LOGIC CELL                                                                                    |
| 90028935     | Application  |               | 4/3/2013    |            | 13881272.2         | EP | Cartridge Interdependence Switch                                                                              |
| 90031036     | Application  |               | 3/15/2013   |            | 13877870.9         | EP | Sending Encrypted Data to a Service Provider                                                                  |
| 90031117     | Application  |               | 9/4/2015    |            | 13881803.4         | EP | AUTOMATED CONTEXTUAL-BASED SOFTWARE LOCALIZATION                                                              |
| 90041281     | Application  |               | 3/13/2013   |            | 13878062.2         | EP | COUPLED RING RESONATOR SYSTEM                                                                                 |
| 90041304     | Application  |               | 3/13/2013   |            | 13878349.3         | EP | BACKLIGHT HAVING COLLIMATING REFLECTOR                                                                        |
| 90041324     | Application  |               | 8/28/2015   |            | 13881834.9         | EP | MODE CONVERSION FOR OPTICAL ISOLATION                                                                         |
| 90043614     | Application  |               | 3/11/2013   |            | 13877542.4         | EP | EVENT CORRELATION BASED ON CONFIDENCE FACTOR                                                                  |
| 90049327     | Application  |               | 3/26/2013   |            | 13880248.3         | EP | TOP LOADING CARTRIDGE                                                                                         |
| 90049353     | Application  |               | 3/26/2013   |            | 13880354.9         | EP | TOP LOADING CARTRIDGE                                                                                         |
| 90049368     | Application  |               | 3/26/2013   |            | 13880430.7         | EP | TOP LOADING CARTRIDGE                                                                                         |
| 90049387     | Application  |               | 3/28/2013   |            | 13880256.6         | EP | MAKING MEMORY OF COMPUTE AND EXPANSION BLADE DEVICES AVAILABLE FOR USE BY AN OPERATING SYSTEM                 |
| 90051005     | Application  |               | 3/7/2013    |            | 13877091.2         | EP | CLOUD APPLICATION BANDWIDTH MODELING                                                                          |
| 90051526     | Application  |               | 3/28/2013   |            | 13880294.7         | EP | IDENTIFYING MEMORY OF A BLADE DEVICE FOR USE BY AN OPERATING SYSTEM OF A PARTITION INCLUDING THE BLADE DEVICE |
| 90051548     | Application  |               | 3/29/2013   |            | 13880271.5         | EP | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING NODE                                                             |
| 90052805     | Application  |               | 3/14/2013   |            | 13877967.3         | EP | MULTIVERSED NONVOLATILE MEMORY HIERARCHY FOR PERSISTENT MEMORY                                                |
| 90053632     | Application  |               | 4/3/2013    |            | 13880943.9         | EP | ZONEABLE POWER REGULATION                                                                                     |
| 90056369     | Application  |               | 4/3/2013    |            | 13881062.7         | EP | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                   |
| 90056901     | Acknowledged |               | 4/3/2013    |            |                    | EP | Managing Firmware Updates                                                                                     |

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| 90056959     | Application  |               | 3/15/2013   |            | 1387817.1          | EP | CLOUD-BASED CONNECTIVITY                                                                                                    |
| 90056990     | Acknowledged |               | 6/14/2013   |            |                    | EP | LOOP-FREE HYBRID NETWORK                                                                                                    |
| 90068094     | Acknowledged |               | 3/29/2013   |            |                    | EP | BATCHING TUPLES                                                                                                             |
| 90068701     | To Be Filed  |               | 4/16/2013   |            |                    | EP | DISTRIBUTED EVENT CORRELATION SYSTEM                                                                                        |
| 84174518     | Published    |               | 9/26/2012   |            | 12885454.4         | EP | MULTICAST MESSAGE UPDATE                                                                                                    |
| 83747177     | Published    |               | 7/20/2011   |            | 11869642.6         | EP | POWER SUPPLY SYSTEM WITH DYNAMIC FILTERING                                                                                  |
| 83995821     | Published    |               | 4/20/2012   |            | 12874521.3         | EP | VOLTAGE REGULATOR CONTROL SYSTEM                                                                                            |
| 82235324     | Published    |               | 2/15/2008   |            | 8743482.5          | EP | Coolant Pulsing For Computer System                                                                                         |
| 82240571     | Published    |               | 2/26/2008   |            | 8726106.1          | EP | Improved Fan And Colling Device                                                                                             |
| 83854682     | Published    |               | 10/28/2011  |            | 11874565.2         | EP | Fan Impeller with Multiple Blades Shaped and Disposed To Provide High Air-Power Efficiency                                  |
| 83995715     | Published    |               | 2/9/2012    |            | 12867753.1         | EP | HEAT DISSIPATING SYSTEM                                                                                                     |
| 84274117     | Application  |               |             |            | 13866878.5         | EP | SYSTEMS AND METHODS FOR PREDICTIVE POWER MANAGEMENT IN A COMPUTING CENTER                                                   |
| 90022717     | Application  |               | 3/27/2013   |            | 13880644.3         | EP | Non-Volatile Memory Based Synchronous Logic                                                                                 |
| 90024609     | Application  |               | 3/25/2013   |            | 13880334.1         | EP | MEMORY DEVICE HAVING ERROR CORRECTION LOGIC                                                                                 |
| 90048545     | Application  |               | 4/30/2013   |            | 13883828.9         | EP | Coalescing Memory Access Requests                                                                                           |
| 83127184     | Published    |               | 10/13/2010  |            | 10858499.6         | EP | DASHBOARD DISPLAY METHOD AND APPARATUS                                                                                      |
| 82585362     | Published    |               | 8/4/2009    |            | 9807074.1          | EP | APPARATUS, AND ASSOCIATED METHOD, FOR TRACKING AIRCRAFT STATUS                                                              |
| 84306291     | Application  |               | 1/22/2013   |            | 13872715.1         | EP | DETERMINING A REMEDIAL ACTION FOR A MOTORIZED VEHICLE BASED ON SENSED VIBRATION                                             |
| 83501092     | Published    |               | 2/23/2011   |            | 11859470.4         | EP | METHOD AND APPARATUS FOR MANAGING DEVICES                                                                                   |
| 84078669     | Published    |               | 5/24/2012   |            | 12877339.7         | EP | Fiber Connector Assembly                                                                                                    |
| 84104743     | Published    |               | 8/17/2012   |            | 12882890.2         | EP | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY |
|              |              |               |             |            |                    |    | Firmware Storage Medium With Customized Image                                                                               |
| 82672074     | Published    |               | 10/8/2008   |            | 8824871.1          | EP | PREARRANGING DATA TO COMMIT TO NON-VOLATILE MEMORY                                                                          |
| 83952223     | Published    |               | 5/1/2012    |            | 12875997.4         | EP | RE-VERIFICATION OF A DEVICE                                                                                                 |
| 84106320     | Published    |               | 6/29/2012   |            | 12879889.9         | EP | Power Management Method For Use In A Wireless Local Area Network (LAN)                                                      |
| 82068257     | Published    |               | 6/8/2005    |            | 5105012.8          | EP | System And Method For Securing A Network From Zero-day Vulnerability Exploits                                               |
| 82243688     | Published    |               | 4/2/2009    |            | 9004917.2          | EP | A Method And Apparatus For Policy Enforcement Using A Tag                                                                   |
| 82884863     | Published    |               | 5/15/2009   |            | 9844739.4          | EP | MALICIOUS CODE DETECTION                                                                                                    |
| 82931338     | Published    |               | 10/31/2009  |            | 9850988.8          | EP | FABRIC CHIP HAVING A PORT RESOLUTION MODULE                                                                                 |
| 83733005     | Published    |               | 8/8/2011    |            | 11870535.9         | EP | PROPER INSTALLATION DETERMINATION BASED ON RFID                                                                             |
| 83977172     | Application  |               | 12/21/2011  |            | 11877730.9         | EP |                                                                                                                             |

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| 83991410     | Published    |               | 4/26/2012   |            | 12875506.3 EP      | EP | MULTICAST ROUTING PATH CHECK                                                                  |
| 84140054     | Application  |               | 10/31/2012  |            | 12887666.1 EP      | EP | SIGNALING EXISTENCE OF A NETWORK NODE THAT IS IN REDUCED-POWER MODE                           |
| 84016717     | Published    |               | 2/29/2012   |            | 12870035.8 EP      | EP | INFORMATION TRANSMISSION FROM WIRELESS ACCESS POINT                                           |
| 84017584     | Application  |               | 4/27/2012   |            | EP 12875419.9 EP   | EP | HOME NETWORK PACKET DELIVERY                                                                  |
| 84302003     | Application  |               | 3/31/2013   |            |                    | EP | SCHEDULE FOR ACCESS TO SHARED WIRELESS MEDIUM BASED ON PROFILE DATA                           |
| 90016431     | Application  |               | 1/23/2013   |            | 13872576.7 EP      | EP | Balancing Access Point Workloads                                                              |
| 90056866     | Acknowledged |               | 3/15/2013   |            |                    | EP | MULTIBAND OPERATION OF A SINGLE WI-FI RADIO                                                   |
| 83952429     | Published    |               | 5/1/2012    |            | 12876047.7 EP      | EP | SEGMENT COMBINING FOR DEDUPLICATION                                                           |
| 82065572     | Published    |               | 12/19/2002  |            | 2258806.5 EP       |    | System And Method For Securing Drive Access To Data Storage Media Based On Medium Identifiers |
| 84306377     | Application  |               | 1/30/2013   |            | 13873802.6 EP      | EP | SYSTEMS AND METHODS FOR DETERMINING COMPATIBILITY BETWEEN SOFTWARE LICENSES                   |
| 83814330     | Application  |               | 10/28/2011  |            | 11874526.4 EP      | EP | METHOD AND SYSTEM FOR SINGLE POINT OF FAILURE ANALYSIS AND REMEDIATION                        |
| 82238069     | Published    |               | 3/6/2008    |            | 8726501.3 EP       | EP | Prediction Of Systems Location Inside A Data Center By Using Correlation Coefficients         |
| 84141242     | Application  |               | 10/31/2012  |            | 12887824.6 EP      | EP | THERMAL STABILIZATION SHIPPING SYSTEM AND METHOD                                              |
| 83442157     | Application  |               | 3/3/2011    |            | 11859701.2 EP      | EP | RECORDS MANAGEMENT SYSTEM                                                                     |
| 84079565     | Published    |               | 5/15/2012   |            | 12876868.6 EP      | EP | PATTERN MINING BASED ON OCCUPANCY                                                             |
| 84289440     | Application  |               | 6/19/2015   |            | 13874092.3 EP      | EP | STORING BACKUP DATA SEPARATE FROM CATALOG DATA                                                |
| 84312540     | Application  |               | 7/20/2015   |            | 13876637.3 EP      | EP | SELECTING A BACKUP TYPE BASED ON CHANGED DATA                                                 |
| 82241753     | Published    |               | 11/13/2008  |            | 8852536.5 EP       | EP | AUTOMATED RE-ORDERING OF COLUMNS FOR ALIGNMENT TRAP REDUCTION                                 |
| 82176515     | Published    |               | 3/22/2005   |            | 5251733.1 EP       | EP | Remote Software Support Agent System                                                          |
| 83217749     | Application  |               | 10/27/2010  |            | 10859064.7 EP      | EP | SYSTEMS AND METHODS FOR SCHEDULING CHANGES                                                    |
| 83719059     | Application  |               | 5/20/2011   |            | 11866356.6 EP      | EP | SYSTEM AND METHOD FOR CONFIGURATION POLICY EXTRACTION                                         |
| 82852878     | Published    |               | 10/26/2009  |            | 9848853.9 EP       | EP | Automatic Redundant Logical Connections                                                       |
| 83141957     | Application  |               | 6/30/2010   |            | 10854217.6 EP      | EP | Tracking A Server Request                                                                     |
| 83681555     | Published    |               | 3/30/2011   |            | 11862280.2 EP      | EP | TIME FRAME BASED DATA ANALYSIS                                                                |
| 82239071     | Application  |               | 2/29/2008   |            | 8731110.6 EP       | EP | Identification Of Elements Of Currently-executing Component Script                            |
| 83498530     | Application  |               | 2/18/2011   |            | 11858666.8 EP      | EP | GENERATING TEST DATA                                                                          |
| 83543316     | Published    |               | 3/8/2011    |            | 11860667.2 EP      | EP | CREATING A TEST CASE                                                                          |
| 83701561     | Application  |               | 5/3/2011    |            | 11864892.2 EP      | EP | AUTOMATIC CLASSIFICATION ADJUSTMENT OF RECORDED ACTIONS FOR AUTOMATION SCRIPT                 |
| 83987162     | Published    |               | 1/23/2012   |            | 12866734.2 EP      | EP | IDENTIFYING A POLLING COMMUNICATION PATTERN                                                   |

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| 84071965     | Application  |               | 4/23/2012   |            | EP12875334.0 EP    |    | SOFTWARE DEFECT VERIFICATION                                                          |
| 84312703     | Application  |               | 2/28/2013   |            | 13876193.7 EP      |    | DETERMINING COVERAGE OF DYNAMIC SECURITY SCANS USING RUNTIME AND STATIC CODE ANALYSES |
| 82250624     | Published    |               | 4/8/2010    |            | 10159418.2 EP      |    | Policy-provisioning                                                                   |
| 83140168     | Application  |               | 6/30/2010   |            | 10854216.8 EP      |    | SYSTEM AND METHOD FOR SELF-SERVICE CONFIGURATION OF AUTHORIZATION                     |
| 83195279     | Published    |               | 10/13/2010  |            | 10858500.1 EP      |    | CREATING A CONFIGURATION FILE TEMPLATE                                                |
| 84092609     | Application  |               | 6/8/2012    |            | 12878465.9 EP      |    | CLOUD APPLICATION DEPLOYMENT                                                          |
| 84148238     | Application  |               | 8/13/2012   |            | 12891384.5 EP      |    | PERFORMANCE TESTS IN A CONTINUOUS DEPLOYMENT PIPELINE                                 |
| 84252640     | Application  |               | 12/3/2012   |            | 12889437.5 EP      |    | CLOUD SERVICE MANAGEMENT SYSTEM                                                       |
| 82211162     | Published    |               | 7/1/2005    |            | 5300547.6 EP       |    | A Method Or Apparatus For Routing Signaling Messages In A Network                     |
| 82215659     | Published    |               | 7/11/2006   |            | 6300791.8 EP       |    | Method And System Of Processing Presence Information In Communications System         |
| 82235822     | Published    |               | 11/15/2007  |            | 7301551.3 EP       |    | Communication Methods And Systems                                                     |
| 82251182     | Published    |               | 7/20/2009   |            | 9290575.1 EP       |    | Methods And Apparatus For Bookmarking                                                 |
| 82789283     | Published    |               | 1/28/2010   |            | 10736399.6 EP      |    | Conference-call System And Conference-specific Access Codes                           |
| 83271675     | Application  |               | 3/30/2011   |            | 11862484 EP        |    | SYSTEMS AND METHODS FOR GENERATING A SHORTENED NOTIFICATION OF AN INCOMING CALL       |
| 83692295     | Application  |               | 10/31/2013  |            | 13306499.8 EP      |    | TILE-BASED GRAPHICAL EXPLORATION OF COLLECTIONS OF OBJECTS                            |
| 83694960     | Published    |               | 10/24/2011  |            | 11868774.8 EP      |    | PROVIDE SERVICES USING UNIFIED COMMUNICATION CONTENT                                  |
| 83960049     | Application  |               | 7/25/2014   |            | 14178638.4 EP      |    | Website Framework                                                                     |
| 83769043     | Published    |               | 6/29/2011   |            | 11868534.6 EP      |    | Application Migration with Dynamic Operating System Containers                        |
| 83114197     | Application  |               | 4/29/2010   |            | 10850871.4 EP      |    | DOCUMENT REGISTRY SYSTEM                                                              |
| 83229093     | Published    |               | 10/14/2010  |            | 10858507.6 EP      |    | CONTINUOUS QUERYING OF A DATA STREAM                                                  |
| 83566619     | Application  |               | 3/1/2011    |            | 11859084.3 EP      |    | Pattern Recognition                                                                   |
| 84162971     | Application  |               | 8/30/2012   |            | 12891380.3 EP      |    | ENCRYPTED DATA STORE FOR RECORDS                                                      |
| 84304333     | Application  |               | 3/15/2013   |            | 13877639.8 EP      |    | MAP MATCHING                                                                          |
| 90016560     | Application  |               | 1/29/2013   |            | 13873869.5 EP      |    | METHODS AND SYSTEMS FOR SHARED FILE STORAGE                                           |
| 90068041     | Acknowledged |               | 3/28/2013   |            | EP                 |    | Generating a Feature Set                                                              |
| 83193693     | Published    |               | 9/30/2010   |            | 10803245.9 EP      |    | Virtual Machines                                                                      |
| 83518885     | Published    |               | 5/2/2011    |            | 11859384.7 EP      |    | Digital Signatures                                                                    |
| 83776059     | Published    |               | 7/29/2011   |            | 11870379.2 EP      |    | CREDENTIAL VALIDATION                                                                 |
| 84312826     | Application  |               | 1/31/2013   |            | 13873289.6 EP      |    | TARGETED SECURITY ALERTS                                                              |

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| 83099507     | Published   |               | 4/19/2010   |            | 10850362.4         | EP | NANOSCALE SWITCHING DEVICES WITH PARTIALLY OXIDIZED ELECTRODES                                                                                                              |
| 83933010     | Published   |               | 12/12/2011  |            | 11877460.3         | EP | MEMRISTORS AND METHODS OF FABRICATION                                                                                                                                       |
| 84078603     | Published   |               | 7/31/2012   |            | 12882243.4         | EP | NON-VOLATILE RESISTIVE MEMORY CELLS                                                                                                                                         |
| 83130015     | Published   |               | 6/29/2010   |            | 10853815.8         | EP | Tenant Isolation In A Multi-tent Cloud System                                                                                                                               |
| 84077627     | Published   |               | 7/31/2012   |            | 12882394.5         | EP | IMPLEMENTING A TRANSITION PROTOCOL IN WHICH A FIRST RULE SET FOR ROUTING PACKETS RECEIVED BY A GROUP OF SWITCHES DURING A FIRST TIME PERIOD IS UPDATED TO A SECOND RULE SET |
| 84312643     | Application |               | 1/18/2013   |            | 13871956.2         | EP | PREVENTING A MEMORY ATTACK TO A WIRELESS ACCESS POINT                                                                                                                       |
| 82174139     | Published   |               | 4/28/2005   |            | 5743382.3          | EP | Quantum Optical State Converter                                                                                                                                             |
| 82242566     | Published   |               | 3/11/2008   |            | 8726728.2          | EP | Optoelectronic Switches Using On-chip Optical Waveguides                                                                                                                    |
| 82247621     | Published   |               | 4/29/2009   |            | 9743297.5          | EP | OPTICAL WAVEGUIDES AND METHODS OF MAKING THE SAME                                                                                                                           |
| 82405577     | Published   |               | 5/9/2008    |            | 8754323.7          | EP | Optically Enabled Broadcast Bus                                                                                                                                             |
| 82573995     | Published   |               | 6/17/2008   |            | 8768539.2          | EP | Optical Broadcast Systems And Methods                                                                                                                                       |
| 82879622     | Published   |               | 4/28/2009   |            | 9844148.8          | EP | ANGLED COUPLING FOR OPTICAL FIBERS                                                                                                                                          |
| 82930502     | Published   |               | 1/6/2010    |            | 10842367.4         | EP | OPTICAL INTERCONNECT                                                                                                                                                        |
| 83858306     | Published   |               | 10/21/2011  |            | 11874278.2         | EP | GRATING COUPLERS WITH DEEP-GROOVE NON-UNIFORM GRATINGS                                                                                                                      |
| 83932074     | Published   |               | 12/9/2011   |            | 11879161.5         | EP | Optical Connections                                                                                                                                                         |
| 83992426     | Published   |               | 4/25/2012   |            | 12875327.4         | EP | ANALYZING LIGHT BY MODE INTERFERENCE                                                                                                                                        |
| 83992446     | Published   |               | 4/26/2012   |            | 12875430.6         | EP | OPTICAL SLAB                                                                                                                                                                |
| 84057418     | Published   |               | 10/31/2008  |            | 14188845.3         | EP | Optical Beam Couplers And Splitters                                                                                                                                         |
| 84076004     | Published   |               | 5/29/2012   |            | 12877675.4         | EP | DEVICES INCLUDING INDEPENDENTLY CONTROLLABLE ABSORPTION REGION AND MULTIPLICATION REGION ELECTRIC FIELDS                                                                    |
| 84113021     | Published   |               | 7/30/2012   |            | 12882354.9         | EP | COMPACT PHOTONIC PLATFORMS                                                                                                                                                  |
| 82919304     | Published   |               | 8/3/2009    |            | 9848120.3          | EP | LINKING MODEL INSTANCES TO PACKAGES                                                                                                                                         |
| 83696815     | Published   |               | 6/30/2011   |            | 11868747.4         | EP | SYSTEMS AND METHODS FOR MERGING PARTIALLY AGGREGATED QUERY RESULTS                                                                                                          |
| 84141268     | Published   |               | 7/31/2012   |            | 12882247.5         | EP | VULNERABILITY VECTOR INFORMATION ANALYSIS                                                                                                                                   |
| 82938311     | Published   |               | 12/8/2009   |            | 9852129.7          | EP | Managing Errors In A Data Processing System                                                                                                                                 |
| 82836834     | Published   |               | 7/30/2007   |            | 7799915.9          | EP | QUERY OPTIMIZER                                                                                                                                                             |
| 84079625     | Published   |               | 6/1/2012    |            | 12878146.5         | EP | MERGING DATA FROM A SOURCE LOCATION INTO A TARGET LOCATION                                                                                                                  |
| 84079648     | Published   |               | 6/4/2012    |            | 12887850.1         | EP | MANAGING AN ANALYTIC FUNCTION TO BE PERFORMED ON DATA STORED IN AN INPUT BLOCK                                                                                              |

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| 82256864     | Published    |               | 1/26/2006   |            | 6733930.9          | EP | System, Method, And Computer Program Product For B          |
| 83991656     | Published    |               | 4/30/2012   |            | EP12876027.9       | EP | based Utility Computing Pricing                             |
| 84279576     | Application  |               | 12/11/2012  |            | 12889906.9         | EP | AUTOMATED EVENT MANAGEMENT                                  |
| 84237827     | Application  |               | 12/11/2012  |            | 12889809.5         | EP | Provisioning Tools for Application Development              |
| 82925925     | Published    |               | 1/28/2010   |            | 11737662.4         | EP | Data Operation in Shift Register Ring                       |
| 83681014     | Published    |               | 3/14/2011   |            | 11860733.2         | EP | Interface Methods And Apparatus For Memory Devices          |
| 83789129     | Published    |               | 9/14/2011   |            | 11872383.2         | EP | MEMORY INTERFACE                                            |
|              |              |               |             |            |                    |    | IMPARTING DURABILITY TO A TRANSACTIONAL MEMOR               |
|              |              |               |             |            |                    |    | SYSTEM                                                      |
| 83988390     | Published    |               | 4/25/2012   |            | 12875141.9         | EP | NETWORK MANAGEMENT                                          |
| 84201013     | Published    |               | 9/28/2012   |            | 12885229           | EP | System and Method for Dynamically Selecting Between         |
|              |              |               |             |            |                    |    | Memory Error Detection and Error Correction                 |
| 84217950     | Published    |               | 11/6/2012   |            | 12887963.2         | EP | ENHANCED GRAPH TRAVERSAL                                    |
| 84304439     | Application  |               | 7/10/2015   |            | 13873873.7         | EP | RECOVERING PAGES OF A DATABASE                              |
| 90053557     | Acknowledged |               | 3/28/2013   |            |                    | EP | STORING DATA FROM CACHE LINES TO MAIN MEMORY                |
|              |              |               |             |            |                    |    | BASED ON MEMORY ADDRESSES                                   |
| 82065563     | Published    |               | 12/19/2002  |            | 2258789.3          | EP | System And Method For Securing Drive Access To Media        |
|              |              |               |             |            |                    |    | Based On Medium Identification Numbers                      |
| 82083860     | Published    |               | 4/5/2005    |            | 5007420.2          | EP | Methods And Apparatus For Providing Menu Data To A          |
|              |              |               |             |            |                    |    | Storage Automation Library                                  |
| 84138405     | Published    |               | 9/27/2012   |            | 12885276.1         | EP | ALLOCATING WORKLOADS BASED ON AIR FLOW PRIORITY             |
| 84192574     | Published    |               | 9/28/2012   |            | 12885470           | EP | COOLING ASSEMBLY                                            |
| 84262627     | Application  |               | 1/30/2013   |            | 13873972.7         | EP | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN               |
|              |              |               |             |            |                    |    | COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM            |
| 83230338     | Published    |               | 10/28/2010  |            | 10859082.9         | EP | ZONING DATA TO A VIRTUAL MACHINE                            |
| 84072039     | Published    |               | 6/28/2012   |            | 12880270.9         | EP | MEMORY MODULE WITH A DUAL-PORT BUFFER                       |
| 84224851     | Application  |               | 3/29/2013   |            | 13879997.8         | EP | PERFORMANCE RULES AND STORAGE UNITS                         |
| 82892394     | Published    |               | 7/17/2009   |            | 9847442.2          | EP | Virtual Hot Inserting Functions In A Shared I/O Environment |
| 83094377     | Published    |               | 5/28/2010   |            | 10852313.5         | EP | DISABLING A DISPLAY REFRESH PROCESS                         |
| 84119012     | Published    |               | 8/13/2012   |            | 12891410.8         | EP | TRANS-IMPEDANCE AMPLIFIERS (TIA) THERMALLY ISOLATED         |
|              |              |               |             |            |                    |    | FROM OPTICAL MODULES                                        |
| 84050565     | Published    |               | 3/30/2012   |            | 12873041.3         | EP | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE           |
|              |              |               |             |            |                    |    | FOR A VIOLATION OF THE PERIMETER                            |
| 84191761     | Published    |               | 8/9/2013    |            | 13840348           | EP | QR CODE UTILIZATION IN SELF-REGISTRATION IN A NETWORK       |
|              |              |               |             |            |                    |    |                                                             |
| 82273715     | Published    |               | 5/16/2002   |            | 2769763            | EP | AUTHENTICATION METHOD                                       |
| 82715732     | Published    |               | 10/31/2008  |            | 8877898            | EP | Method And Apparatus For Network Intrusion Detection        |

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| 82931283     | Published   |               | 8/9/2009    |            | 9848321.7 EP       | EP | Illuminable Indicator Of Electronic Device Being Enabled<br>Based At Least On User Presence |
| 82939693     | Published   |               | 10/28/2009  |            | 9850960.7 EP       | EP | Method And Apparatus For Tracing A Multicast Flow                                           |
| 83161101     | Published   |               | 7/26/2010   |            | 10855422.1 EP      | EP | Mitigation Of Detected Patterns In A Network Device                                         |
| 83425454     | Published   |               | 2/18/2011   |            | 11859001.7 EP      | EP | METHODS FOR CONTROLLING ELECTIONS IN A MULTICAST<br>NETWORK                                 |
| 83698841     | Published   |               | 7/18/2011   |            | 11869560 EP        | EP | Optical Interconnect                                                                        |
| 83991398     | Application |               | 4/25/2012   |            | 12875654.1 EP      | EP | INTER DOMAIN LINK FOR FIBRE CHANNEL                                                         |
| 84168269     | Published   |               | 8/21/2012   |            | 12883292 EP        | EP | CONGESTION NOTIFICATION IN A NETWORK                                                        |
| 90017132     | Application |               | 1/31/2013   |            | 13874175.6 EP      | EP | NETWORK SWITCH STIMULATION                                                                  |
| 83421813     | Published   |               | 6/28/2011   |            | 11868819.1 EP      | EP | METHOD OF ASSOCIATING A CLIENT WITH AN ACCESS POINT<br>IN A WIRELESS LOCAL AREA NETWORK     |
| 83782545     | Published   |               | 11/4/2011   |            | 11875149.4 EP      | EP | Fault Processing In a System                                                                |
| 83952377     | Application |               | 5/1/2012    |            | 12876001.4 EP      | EP | DETERMINING SEGMENT BOUNDARIES FOR DEDUPPLICATION                                           |
| 83973127     | Published   |               | 4/24/2012   |            | 12871225.4 EP      | EP | Determining A Schedule For A Job To Replicate An Object<br>Stored On A Storage Appliance    |
| 83992755     | Published   |               | 3/29/2012   |            | 12872632 EP        | EP | A Conceptual Services Implementation Platform                                               |
| 83929635     | Published   |               | 11/15/2011  |            | 11875849.9 EP      | EP | Mobilized Sensor System                                                                     |
| 82585293     | Published   |               | 10/12/2009  |            | 9821078.4 EP       | EP | SYSTEMS AND PROCESSES FOR SECURING SENSITIVE<br>INFORMATION                                 |
| 82858557     | Published   |               | 4/28/2010   |            | 10770283.9 EP      | EP | IMPROVEMENTS IN OR RELATING TO COOLING                                                      |
| 83210541     | Application |               | 10/25/2010  |            | 10859048 EP        | EP | PROVIDING INFORMATION MANAGEMENT                                                            |
| 83487904     | Published   |               | 3/17/2011   |            | 11860892.6 EP      | EP | DATA SOURCE ANALYTICS                                                                       |
| 84142527     | Published   |               | 7/12/2012   |            | 12880789.8 EP      | EP | PROVIDING DATA TO BE RETRIEVED                                                              |
| 82675566     | Application |               | 10/13/2008  |            | 8877461.7 EP       | EP | Trend Determination And Identification                                                      |
| 82195607     | Published   |               | 11/8/2005   |            | 5300906.4 EP       | EP | ALARM CONSOLIDATION IN IT INFRASTRUCTURES                                                   |
| 82676605     | Published   |               | 10/16/2008  |            | 8877470.8 EP       | EP | Performance Analysis Of Applications                                                        |
| 83136080     | Application |               | 6/1/2010    |            | 10852611.2 EP      | EP | Methods, Apparatus, And Articles Of Manufacture To Deploy<br>Software Applications          |
| 83691267     | Application |               | 4/4/2011    |            | 11863207.4 EP      | EP | CREATING A CORRELATION RULE DEFINING A RELATIONSHIP<br>BETWEEN EVENT TYPES                  |
| 84116994     | Application |               | 6/22/2012   |            | 12879356.9 EP      | EP | OPTIMAL ASSIGNMENT OF VIRTUAL MACHINES AND VIRTUAL<br>DISKS USING MULTIARY TREE             |
| 82244366     | Published   |               | 2/11/2005   |            | 5723013.8 EP       | EP | System And Method For Testing Web Applications With<br>Recursive Discovery And Analysis     |
| 83681492     | Published   |               | 5/6/2011    |            | 11865318.7 EP      | EP | IMAGE-BASED AUTOMATION SYSTEMS AND METHODS                                                  |
| 83991756     | Application |               | 1/31/2012   |            | 12867378.7 EP      | EP | IDENTIFICATION OF A FAILED CODE CHANGE                                                      |
| 84071853     | Application |               | 4/20/2012   |            | EP12874895.1 EP    | EP | TESTING SYSTEM FOR AN INTEGRATED SOFTWARE SYSTEM                                            |
| 84139985     | Application |               | 7/31/2012   |            | 12882067.7 EP      | EP | INSTRUMENTED FILE DEPLOYMENT                                                                |

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| 84202587     | Application |               | 11/28/2012  |            | 12889336.9         | EP | REGULATING APPLICATION TASK DEVELOPMENT                                                         |
| 82581168     | Published   |               | 5/12/2005   |            | 5748199.6          | EP | APPARATUS AND METHOD FOR DEVELOPING, TESTING AND MONITORING SECURE SOFTWARE                     |
| 83998474     | Published   |               | 2/29/2012   |            | 12869680.4         | EP | NETWORK SERVICE INTERFACE ANALYSIS                                                              |
| 83139750     | Application |               | 6/21/2010   |            | 10853786.1         | EP | SYSTEM FOR TESTING AND CERTIFYING A VIRTUAL APPLIANCE ON A CUSTOMER COMPUTER SYSTEM             |
| 83141931     | Application |               | 6/30/2010   |            | 10854213.5         | EP | SYSTEM AND METHOD FOR SERVICE RECOMMENDATION SERVICE                                            |
| 83992735     | Application |               | 1/31/2013   |            | 13873442.1         | EP | DEFINING A DESIGN PLAN                                                                          |
| 84072855     | Application |               | 6/8/2012    |            | 12878445           | EP | TEST AND MANAGEMENT FOR CLOUD APPLICATIONS                                                      |
| 84121734     | Application |               | 7/31/2012   |            | 12882420.8         | EP | MONITORING FOR MANAGED SERVICES                                                                 |
| 90000092     | Application |               | 1/31/2013   |            | 13873308.4         | EP | PHYSICAL RESOURCE ALLOCATION                                                                    |
| 90031141     | Application |               | 9/10/2015   |            | 13883689.5         | EP | Coordinating Application Deployment with a Platform Tier                                        |
| 82189115     | Published   |               | 7/1/2005    |            | 5856213.3          | EP | Improvements In Or Relating To Electronic Document Browsing                                     |
| 82229762     | Published   |               | 1/29/2008   |            | 8708353.1          | EP | Service Routing For Communication Systems                                                       |
| 82241183     | Published   |               | 1/20/2009   |            | 9150969.5          | EP | Data Processing Method And System                                                               |
| 82247681     | Published   |               | 1/30/2009   |            | 9305087            | EP | Communications System And Method                                                                |
| 82906148     | Published   |               | 1/26/2010   |            | 10701365.8         | EP | Communications System And Method                                                                |
| 83881371     | Published   |               | 10/13/2011  |            | 12840571.9         | EP | PROVISIONING A TELEPHONY NETWORK IN RESPONSE TO AN ELECTRONIC DEVICE ATTACHING TO THE NETWORK   |
| 83990814     | Application |               | 4/20/2012   |            | 12874503.1         | EP | Unified User Profiles                                                                           |
| 84031275     | Application |               | 10/29/2014  |            | 14306730.4         | EP | RENDERING A USER INTERFACE                                                                      |
| 82214462     | Published   |               | 12/11/2007  |            | 7870546.4          | EP | Computer System And Method Of Control Thereof                                                   |
| 83698801     | Application |               | 4/19/2012   |            | 12845582.1         | EP | File Lock Preservation                                                                          |
| 84063609     | Published   |               | 4/30/2012   |            | 12875767.1         | EP | CONFIGURABLE COMPUTER MEMORY                                                                    |
| 82253048     | Published   |               | 4/18/1997   |            | 97922333.6         | EP | System And Method For Automated Retrieval Of Information                                        |
| 83941225     | Application |               | 4/30/2014   |            | 14305651.3         | EP | METHOD AND SYSTEM FOR INVENTORY AVAILABILITY PREDICTION                                         |
| 82253111     | Published   |               | 3/7/2001    |            | 1916443.3          | EP | Method and System for Modeling a Legacy Computer System                                         |
| 82255916     | Published   |               | 9/20/2004   |            | 4784507.8          | EP | TRANSACTION PROCESSING ARCHITECTURE                                                             |
| 82256231     | Published   |               | 4/21/2005   |            | 5729153.6          | EP | METHOD AND SYSTEM FOR STORING SELF-DESCRIPTIVE TABULAR DATA WITH ALPHANUMERIC AND BINARY VALUES |
| 82257605     | Published   |               | 4/21/2009   |            | 9158356.7          | EP | APPARATUS, AND ASSOCIATED METHOD, FOR FACILITATING DATA-CENTER MANAGEMENT                       |
| 82208912     | Published   |               | 4/28/2006   |            | 6758863.2          | EP | Providing Training Information For Training A Categorizer                                       |
| 83053676     | Application |               | 5/11/2010   |            | 10844908.3         | EP | Software Application Testing                                                                    |

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| 84163277     | Application |               | 9/12/2012   |            | 12882895.1 EP      | EP | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                          |
| 84164187     | Application |               | 9/12/2012   |            | 12891393.6 EP      | EP | METADATA TREE WITH KEY ROTATION INFORMATION                                              |
| 90016637     | Application |               | 1/31/2013   |            | 13873548.5 EP      | EP | SYNTHETIC HEALTHCARE DATA GENERATION                                                     |
| 82069622     | Published   |               | 9/17/1999   |            | 99307380.8 EP      | EP | Operation Of Trusted State In Computing Platform                                         |
| 82195739     | Published   |               | 10/27/2005  |            | 5817261 EP         | EP | Methods And Systems For Controlling The Admission Of Media Content Into A Network        |
| 83255742     | Published   |               | 1/31/2011   |            | 11842148.6 EP      | EP | Method and Circuit for Switching a Memristive Device                                     |
| 83992317     | Published   |               | 3/16/2012   |            | 12871063.9 EP      | EP | VARIED MULTILAYER MEMRISTIVE DEVICE                                                      |
| 82924270     | Published   |               | 2/1/2010    |            | EP10844901.8 EP    | EP | Deep Sleep Mode Management For A Network Switch                                          |
| 83721277     | Published   |               | 6/7/2011    |            | 11867520.6 EP      | EP | A SCALABLE MULTI-TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS                 |
| 82217396     | Published   |               | 8/11/2006   |            | 6801268.1 EP       | EP | Quantum Repeater                                                                         |
| 82234946     | Published   |               | 7/30/2008   |            | 8794893.1 EP       | EP | Microresonator Systems And Methods Of Fabricating The Same                               |
| 82405591     | Published   |               | 5/9/2008    |            | 8769411.3 EP       | EP | Methods For Fabrication Of Large Core Hollow Waveguides                                  |
| 82859845     | Published   |               | 4/29/2009   |            | 9844126.4 EP       | EP | OPTICAL MEMORY EXPANSION                                                                 |
| 82884777     | Published   |               | 5/6/2009    |            | 9844441.7 EP       | EP | BUS-BASED SCALABLE OPTICAL FABRICS                                                       |
| 82922736     | Published   |               | 7/17/2009   |            | 9847443 EP         | EP | NON-PERIODIC GRATING REFLECTORS WITH FOCUSING POWER AND METHODS FOR FABRICATING THE SAME |
| 82925999     | Published   |               | 7/31/2009   |            | 9847927.2 EP       | EP | PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS                                   |
| 82926254     | Published   |               | 9/18/2009   |            | 9849626.8 EP       | EP | LIGHT-EMITTING DIODE INCLUDING A METAL-DIELECTRIC-METAL STRUCTURE                        |
| 82930496     | Published   |               | 12/21/2009  |            | 9852671.8 EP       | EP | CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC                                          |
| 82930539     | Published   |               | 9/23/2009   |            | 9849901.5 EP       | EP | OPTICAL DEVICES BASED ON DIFFRACTION GRATINGS                                            |
| 82931432     | Published   |               | 1/29/2010   |            | 10844886.1 EP      | EP | VERTICAL-CAVITY SURFACE-EMITTING LASERS WITH NON-PERIODIC GRATINGS                       |
| 83699780     | Published   |               | 4/20/2011   |            | 11863987.1 EP      | EP | SUB-WAVELENGTH GRATING-BASED OPTICAL ELEMENTS                                            |
| 83706046     | Published   |               | 4/20/2011   |            | 11864014.3 EP      | EP | LIGHT-DETECTION SYSTEMS                                                                  |
| 83734822     | Published   |               | 5/23/2011   |            | 11866034.9 EP      | EP | OPTICAL TRANSMISSION SYSTEM                                                              |
| 83835844     | Published   |               | 9/15/2011   |            | 11872532.4 EP      | EP | VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                  |
| 83883372     | Published   |               | 10/28/2011  |            | 11874725.2 EP      | EP | DEVICES INCLUDING A DIAMOND LAYER                                                        |
| 83948782     | Published   |               | 1/10/2012   |            | 12865019.9 EP      | EP | OPTICAL CONNECTORS                                                                       |
| 84076101     | Published   |               | 7/25/2012   |            | 12881867.1 EP      | EP | Avalanche Photodiodes with Defect-assisted Silicon Absorption Regions                    |
| 84112889     | Published   |               | 7/30/2012   |            | 12882153.5 EP      | EP | OPTICAL COUPLING SYSTEM AND METHOD FOR FABRICATING THE SAME                              |

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| 84202604     | Application |               | 5/19/2015   |            | 12888997.9 EP      | EP | RUNNING AGENTS TO EXECUTE AUTOMATION TASKS IN CLOUD SYSTEMS                                   |
| 83713431     | Published   |               | 5/25/2011   |            | 11865997.8 EP      | EP | IMPLEMENTATION OF NETWORK DEVICE COMPONENTS IN NETWORK DEVICES                                |
| 84136971     | Published   |               | 7/31/2012   |            | 12882301 EP        | EP | NETWORK TRAFFIC PROCESSING SYSTEM                                                             |
| 83131987     | Published   |               | 6/10/2011   |            | 11793250.9 EP      | EP | QUERY PIPELINE                                                                                |
| 83137583     | Published   |               | 6/1/2011    |            | 11790329.4 EP      | EP | Dynamic Multidimensional Schemas for Event Monitoring                                         |
| 83422188     | Published   |               | 10/11/2011  |            | 11862410.5 EP      | EP | Network Topology Discovery                                                                    |
| 84192657     | Published   |               | 10/8/2012   |            | 12886274.5 EP      | EP | ROBUST HARDWARE FAULT MANAGEMENT SYSTEM, METHOD AND FRAMEWORK FOR ENTERPRISE DEVICES          |
| 84292946     | Application |               | 1/31/2013   |            | 13873763 EP        | EP | RAM REFRESH RATE                                                                              |
| 90024185     | Application |               | 2/28/2013   |            | 13876308.1 EP      | EP | RECOVERY PROGRAM USING DIAGNOSTIC RESULTS                                                     |
| 84116619     | Published   |               | 6/4/2012    |            | 12878246.3 EP      | EP | USER-DEFINED LOADING OF DATA ONTO A DATABASE                                                  |
| 83194915     | Published   |               | 8/15/2011   |            | 11818627.9 EP      | EP | STORING ELECTRONIC CONTENT WITH TIME-VARYING PROPERTIES                                       |
| 83782568     | Published   |               | 12/22/2011  |            | 11869688.9 EP      | EP | CRYPTOGRAPHIC INFORMATION ASSOCIATION TO MEMORY REGIONS                                       |
| 83784165     | Published   |               | 1/31/2012   |            | 12814537.2 EP      | EP | Access to Memory Region Including Confidential Information                                    |
| 82184309     | Published   |               | 8/18/2005   |            | 5789083.2 EP       | EP | Mapping Power System Components                                                               |
| 82223390     | Published   |               | 7/11/2007   |            | 7796813.9 EP       | EP | Defect-and-failure-tolerant Demultiplexer Using Series Replication And Error-control Encoding |
| 82242500     | Published   |               | 9/19/2008   |            | 8831712.8 EP       | EP | Generating A Parallel Recovery Plan For A Data Storage System                                 |
| 82933739     | Published   |               | 11/13/2009  |            | 9851339.3 EP       | EP | PARALLELIZED CHECK POINTING USING Mats AND THROUGH SILICON Vias (tsvs)                        |
| 83034234     | Published   |               | 4/28/2010   |            | 10850860.7 EP      | EP | Protecting The Information Encoded In A Bloom Filter Using Encoded Bits Of Data               |
| 83164702     | Published   |               | 7/30/2010   |            | 10855178.9 EP      | EP | Method For Selecting User Desirable Content From Web Pages                                    |
| 84115720     | Published   |               | 6/8/2012    |            | 12878588.8 EP      | EP | ACCESSING MEMORY                                                                              |
| 84304410     | Application |               | 1/23/2013   |            | 13872320 EP        | EP | SHARED RESOURCE CONTENTION                                                                    |
| 90052824     | Application |               | 9/15/2015   |            | EP13878260.2 EP    | EP | CO-PROCESSOR-BASED ARRAY-ORIENTED DATABASE PROCESSING                                         |
| 83854696     | Published   |               | 10/26/2011  |            | 11874616.3 EP      | EP | Device for Cooling an Electronic Component in a Data Center                                   |
| 83995732     | Application |               | 3/12/2012   |            | EP12871455.7 EP    | EP | LIQUID TEMPERATURE CONTROL COOLING                                                            |
| 82680223     | Published   |               | 10/24/2008  |            | 8877605.9 EP       | EP | Magnetic-tape Drive And Magnetic-tape Head Compatible With Multiple Tape Formats              |

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| 82240682     | Published    |               | 3/25/2008   |            | 8732801.9 EP       | EP | Locking Mechanism With Movable And Fixed Members Having Single And Double Locking Features                           |
| 82400882     | Published    |               | 6/19/2008   |            | 8795938.3 EP       | EP | Multi-blade Interconnector                                                                                           |
| 83163774     | Published    |               | 9/16/2010   |            | 10857386.6 EP      | EP | Power Capping System                                                                                                 |
| 83416915     | Published    |               | 2/28/2011   |            | 11859926.5 EP      | EP | A SPRING LOADED LID                                                                                                  |
| 84139561     | Published    |               | 9/28/2012   |            | 12885775.2 EP      | EP | PLENUMS FOR REMOVABLE MODULES                                                                                        |
| 84292917     | Application  |               | 1/31/2013   |            | 13873193 EP        | EP | LIQUID COOLING                                                                                                       |
| 83167830     | Published    |               | 10/16/2010  |            | 10858513.4 EP      | EP | DEVICE HARDWARE AGENT                                                                                                |
| 83543627     | Published    |               | 4/7/2011    |            | 11863230.6 EP      | EP | SYSTEMS AND METHODS FOR DETERMINING A POWER PHASE AND/OR A PHASE ROTATION                                            |
| 83952268     | Application  |               | 5/1/2012    |            | 12876041 EP        | EP | PACKAGED MEMORY DIES THAT SHARE A CHIP SELECT LINE                                                                   |
| 84124745     | Application  |               | 1/30/2013   |            | 13873588.1 EP      | EP | FAILOVER IN RESPONSE TO FAILURE OF A PORT                                                                            |
| 83137199     | Published    |               | 1/29/2010   |            | 10844878.8 EP      | EP | Methods And Systems For An Interposer Board                                                                          |
| 84067642     | Published    |               | 4/30/2012   |            | 12876008.9 EP      | EP | REFLECTIVE MEMORY BRIDGE FOR EXTERNAL COMPUTING NODES                                                                |
| 84076301     | Published    |               | 7/27/2012   |            | 12881801 EP        | EP | OPTICALLY CONNECTING A CHIP PACKAGE TO AN OPTICAL CONNECTOR                                                          |
| 83220857     | Published    |               | 10/26/2010  |            | 10859056.3 EP      | EP | METHODS AND SYSTEMS FOR DETECTING SUSPECTED DATA LEAKAGE USING TRAFFIC SAMPLES                                       |
|              |              |               |             |            |                    |    |                                                                                                                      |
| 84306468     | Acknowledged |               | 3/15/2013   |            | 13877509.3 EP      | EP | ENERGY BASED NETWORK RESTRUCTURING                                                                                   |
| 82746394     | Published    |               | 12/30/2008  |            | 8879315.3 EP       | EP | Storing Network Flow Information                                                                                     |
| 82808598     | Published    |               | 1/29/2009   |            | 9839411.7 EP       | EP | Managing Security In A Network                                                                                       |
| 83133020     | Published    |               | 6/1/2010    |            | 10852609.6 EP      | EP | MULTIPLICED SERIAL MEDIA INDEPENDENT INTERFACE                                                                       |
| 83222068     | Published    |               | 10/27/2010  |            | 10859062.1 EP      | EP | PATTERN DETECTION                                                                                                    |
| 83425385     | Published    |               | 2/10/2011   |            | 11858294.9 EP      | EP | SYSTEMS, METHODS, AND APPARATUS TO AUTHENTICATE COMMUNICATIONS MODULES                                               |
| 83991369     | Application  |               | 1/30/2012   |            | 12867032 EP        | EP | REDUNDANT NON-LOOPING PATHS                                                                                          |
| 82934005     | Published    |               | 1/31/2010   |            | 10844898.6 EP      | EP | METHOD AND SYSTEM FOR MANAGEMENT OF SAMPLED TRAFFIC DATA                                                             |
| 82256408     | Published    |               | 9/16/2005   |            | 5797409.9 EP       | EP | REPORTING OF ABNORMAL COMPUTER RESOURCE UTILIZATION DATA                                                             |
| 82257470     | Published    |               | 6/27/2008   |            | 8772097.5 EP       | EP | APPARATUS, AND AN ASSOCIATED METHODOLOGY, FOR FACILITATING AUTHENTICATION USING A DIGITAL MUSIC AUTHENTICATION TOKEN |
| 82817463     | Application  |               | 3/13/2009   |            | 9841630.8 EP       | EP | A PLURALITY OF SENSORS COUPLED TO A SERIES OF SWITCHING DEVICES                                                      |
| 82930241     | Published    |               | 9/23/2009   |            | 9849903.1 EP       | EP | PROVIDING IN RUSH CURRENT TOLERANCE TO AN ELECTRONIC DEVICE                                                          |

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| 84312565     | Application  |               | 2/28/2013   |            | 13876297.6 EP      |    | REDUCING POWER FOR STORAGE DEVICES                                                       |
| 82852866     | Published    |               | 7/31/2009   |            | 9847933 EP         |    | Method And System To Recognize And Inventory Applications                                |
| 82919272     | Published    |               | 6/15/2010   |            | 10799525 EP        |    | Method And System For Verifying Data Accuracy                                            |
| 83118739     | Application  |               | 5/27/2010   |            | 10852302.8 EP      |    | Bundling Configuration Items Into A Composite Configuration Item                         |
| 83584506     | Published    |               | 3/9/2011    |            | 11860194.7 EP      |    | PERFORMING A CHANGE PROCESS BASED ON A POLICY                                            |
| 83184707     | Published    |               | 8/6/2010    |            | 10855713.3 EP      |    | SYSTEM AND METHODS FOR APPORTIONING POWER CONSUMPTION                                    |
| 83185168     | Published    |               | 8/26/2010   |            | 10856518.5 EP      |    | ISOLATION OF PROBLEMS IN A VIRTUAL ENVIRONMENT                                           |
| 83617590     | Published    |               | 3/17/2011   |            | 11861207.6 EP      |    | SELF-ORGANIZATION OF A SATELLITE GRID                                                    |
| 83963506     | Published    |               | 1/20/2012   |            | 12865934.9 EP      |    | STORAGE PROVISIONING NEGOTIATION                                                         |
| 83991329     | Application  |               | 1/26/2012   |            | 12866943.9 EP      |    | IDENTIFYING A PUSH COMMUNICATION PATTERN                                                 |
| 83995574     | Published    |               | 2/7/2012    |            | 12867768.9 EP      |    | TESTING A MOBILE APPLICATION                                                             |
| 84202575     | Application  |               | 5/4/2015    |            | 12888046.5 EP      |    | ASSIMILATING BUSINESS RULES                                                              |
| 90000083     | Application  |               | 1/31/2013   |            | 13873446.2 EP      |    | GENERATING SOFTWARE TEST SCRIPT FROM VIDEO                                               |
| 90000100     | Application  |               | 2/1/2013    |            | 13873809.1 EP      |    | TEST SCRIPT CREATION BASED ON ABSTRACT TEST USER CONTROLS                                |
| 90031129     | Application  |               | 9/4/2015    |            | 13883506.1 EP      |    | DEPENDENCIES BETWEEN FEATURE FLAGS                                                       |
| 82581179     | Published    |               | 8/25/2006   |            | 6802528.7 EP       |    | Apparatus and method for analyzing and supplementing a program to provide security       |
| 84312585     | Acknowledged |               | 7/10/2015   |            | 13875944.4 EP      |    | PRESENTATION OF USER INTERFACE ELEMENTS BASED ON RULES                                   |
| 83117720     | Application  |               | 6/7/2011    |            | 11811941.1 EP      |    | METHOD AND SYSTEM FOR DEPLOYING SaaS (software As A Service) SERVICE BUNDLES             |
| 83140445     | Published    |               | 6/30/2010   |            | 10854215 EP        |    | SYSTEM AND METHOD FOR AN AUTOMATED DATA DISCOVERY SERVICE                                |
| 83995385     | Application  |               | 2/28/2013   |            | 13876692.8 EP      |    | AN INTERFACE FOR CREATING A PLAN ARTIFACT                                                |
| 84161934     | Application  |               | 9/21/2012   |            | 12884906.4 EP      |    | MONITOR USABLE WITH CONTINUOUS DEPLOYMENT                                                |
| 84252628     | Acknowledged |               | 5/22/2015   |            | 12889641.2 EP      |    | CLOUD OBJECT                                                                             |
| 82071299     | Published    |               | 4/23/2002   |            | 2354065.1 EP       |    | Adaptor Module                                                                           |
| 82207277     | Published    |               | 1/12/2006   |            | 6100311.7 EP       |    | Provision Of Services Over A Common Delivery Platform Such As A Mobile Telephony Network |
| 82228880     | Published    |               | 3/31/2008   |            | 8718348.9 EP       |    | Obtaining Feedback For An Accessed Information Item                                      |
| 82242425     | Published    |               | 1/31/2008   |            | 8300063.8 EP       |    | Method And System For Accessing Applications                                             |
| 82249859     | Published    |               | 4/14/2010   |            | 10159857.1 EP      |    | Packet Routing Method, Proxy Server And Apparatus                                        |
| 82562765     | Application  |               | 8/4/2009    |            | 9807069.1 EP       |    | FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                         |
| 83136930     | Application  |               | 7/19/2012   |            | 12305878.6 EP      |    | EDITING INFORMATION WITH SLIDER EDIT TOOLS                                               |
| 83940758     | Application  |               | 4/30/2014   |            | 14305649.7 EP      |    | NETWORK INFRASTRUCTURE MANAGEMENT                                                        |
| 90023638     | Application  |               | 8/6/2015    |            | 15306271.6 EP      |    | DISTRIBUTED EVENT PROCESSING                                                             |

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| 82207340     | Published    |               | 3/3/2005    |            | 5733179.5          | EP | A Method Of Predicting Availability Of A System                                                                        |
| 82811449     | Allowed      |               | 1/29/2009   |            | 9839399.4          | EP | CONNECTING PORTS OF ONE OR MORE ELECTRONIC DEVICES TO DIFFERENT SUBSETS OF NETWORKS BASED ON DIFFERENT OPERATING MODES |
| 83160156     | Published    |               | 7/30/2010   |            | 10855445.2         | EP | METHOD AND SYSTEM OF CONTROLLING POWER CONSUMPTION OF AGGREGATED I/O PORTS                                             |
| 82934045     | Published    |               | 10/26/2009  |            | 9850947.4          | EP | SPARSE INDEX BIDDING AND AUCTION BASED STORAGE DATA DEDUPLICATION                                                      |
| 83114225     | Published    |               | 10/8/2010   |            | 10853378.7         | EP | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                                  |
| 84208486     | Application  |               | 9/30/2012   |            | 12885625.9         | EP |                                                                                                                        |
|              |              |               |             |            |                    |    |                                                                                                                        |
| 84232797     | Application  |               | 10/26/2012  |            | 12887144.9         | EP | Summarization of a document                                                                                            |
| 90016685     | Application  |               | 1/31/2013   |            | 13873297.9         | EP | Linking Media Access Between Devices                                                                                   |
| 90068069     | Acknowledged |               | 3/29/2013   |            |                    | EP | QUERY FEATURES AND QUESTIONS                                                                                           |
| 82176875     | Published    |               | 5/21/2004   |            | 4734282.9          | EP | Use Of Certified Secrets In Communication                                                                              |
| 82201475     | Published    |               | 10/28/2005  |            | 5810957            | EP | Virtual Computing Infrastructure                                                                                       |
| 83728682     | Published    |               | 6/16/2011   |            | 11867722.8         | EP | System and Method for Policy Generation                                                                                |
| 83123545     | Application  |               | 4/23/2010   |            | 10850383           | EP | UPDATING A USER INTERFACE                                                                                              |
| 83265935     | Published    |               | 2/11/2011   |            | 11858017.4         | EP | DETERMINING CHARACTERISTICS OF PARTICIPANTS IN A SOCIAL NETWORK                                                        |
|              |              |               |             |            |                    |    |                                                                                                                        |
| 83974309     | Published    |               | 1/31/2012   |            | 12867410.8         | EP | SINGLE AND DOUBLE CHIP SPARE                                                                                           |
| 90048527     | Application  |               | 4/30/2013   |            | 13883675.4         | EP | Memory Access Rate                                                                                                     |
| 82253786     | Published    |               | 9/19/2006   |            | 6814952.5          | EP | WORD RECOGNITION USING ONTOLOGIES                                                                                      |
| 83738417     | Published    |               | 7/29/2011   |            | 11870340.4         | EP | SYSTEMS AND METHODS FOR DISTRIBUTED RULE-BASED CORRELATION OF EVENTS                                                   |
|              |              |               |             |            |                    |    |                                                                                                                        |
| 83789818     | Published    |               | 8/24/2012   |            | 12827937.9         | EP | MULTIDIMENSION CLUSTERS FOR DATA PARTITIONING                                                                          |
| 83793359     | Published    |               | 1/26/2012   |            | 12853508.5         | EP | CLUSTERING EVENT DATA BY MULTIPLE TIME DIMENSIONS                                                                      |
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| 83927130     | Published    |               | 12/20/2011  |            | 11875015.7         | EP | DISTRIBUTED EVENT PROCESSING                                                                                           |
| 84079484     | Published    |               | 5/30/2012   |            | 12877804           | EP | FIELD SELECTION FOR PATTERN DISCOVERY                                                                                  |
| 84139166     | Published    |               | 7/31/2012   |            | 12882189.9         | EP | CONJOINT VULNERABILITY IDENTIFIERS                                                                                     |
| 83874544     | Published    |               | 10/28/2011  |            | 11874544.7         | EP | Management of A Computer                                                                                               |
| 83965899     | Published    |               | 1/30/2012   |            | 12867657.4         | EP | BOOTING A SERVER USING A REMOTE READ-ONLY MEMORY IMAGE                                                                 |
|              |              |               |             |            |                    |    |                                                                                                                        |
| 84291297     | Application  |               | 1/15/2013   |            | 13871582.6         | EP | Dynamic Firmware Updating                                                                                              |
| 82836839     | Published    |               | 7/30/2007   |            | 7799914.2          | EP | AUTOMATIC VERTICAL-DATABASE DESIGN                                                                                     |
| 82919398     | Published    |               | 7/14/2010   |            | 10735119.9         | EP | DATABASE STORAGE ARCHITECTURE                                                                                          |
| 84217938     | Published    |               | 10/31/2012  |            | 12887437.7         | EP | EXECUTING A QUERY HAVING MULTIPLE SET OPERATORS                                                                        |
| 84241556     | Application  |               | 12/7/2012   |            | 12889572.9         | EP | NETWORK RESOURCE MANAGEMENT                                                                                            |
| 83701892     | Published    |               | 2/8/2012    |            | 12814434.2         | EP | TRANSITION BETWEEN STATES IN A PROCESSOR                                                                               |

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| 82105823     | Published   |               | 9/8/2004    |            | 4783547.5 EP       | EP | Defect-Tolerant And Fault-Tolerant Circuit Interconnections                                           |
| 83858245     | Published   |               | 10/21/2011  |            | 11874307.9 EP      | EP | MEMRISTIVE ELEMENT BASED ON HETERO-JUNCTION OF                                                        |
| 84020509     | Published   |               | 4/26/2012   |            | 12875550.1 EP      | EP | CUSTOMIZABLE NONLINEAR ELECTRICAL DEVICES                                                             |
| 84193713     | Application |               | 1/14/2013   |            | 13871190.8 EP      | EP | NONVOLATILE MEMORY ARRAY LOGIC                                                                        |
| 83034248     | Published   |               | 4/30/2010   |            | 10850894.6 EP      | EP | Method For Routing Data Packets In A Fat Tree Network                                                 |
| 83863154     | Published   |               | 10/11/2011  |            | 11874065.3 EP      | EP | Authenticating a User's Location in a Femtocell-Based Network                                         |
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| 82230377     | Published   |               | 6/16/2008   |            | 8768551.7 EP       | EP | OPTICAL INTERCONNECT                                                                                  |
| 82243364     | Published   |               | 10/23/2008  |            | 8841755.5 EP       | EP | Photonic Interconnects For Computer System Devices                                                    |
| 82634169     | Published   |               | 8/27/2008   |            | 8798820 EP         | EP | Dynamic Impedance Receiver Circuit For Ultrafast Low-power Photodetector                              |
| 82654475     | Published   |               | 9/24/2008   |            | 8823464.6 EP       | EP | Polarization Maintaining Large Core Hollow Waveguides                                                 |
| 82716699     | Published   |               | 10/31/2008  |            | 8877900.4 EP       | EP | Optical Connector Interconnection System And Method                                                   |
| 82790075     | Published   |               | 1/9/2009    |            | 9837742.7 EP       | EP | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                      |
| 82925993     | Published   |               | 7/31/2009   |            | 9847935.5 EP       | EP | BEAM DIRECTION SENSOR                                                                                 |
| 82931423     | Published   |               | 1/29/2010   |            | 10844895.2 EP      | EP | GRATING-BASED OPTICAL FIBER-TO-WAVEGUIDE INTERCONNECTS                                                |
| 83123548     | Published   |               | 5/6/2008    |            | 12193927.6 EP      | EP | FABRICATION OF THIN PELLICLE BEAM SPLITTERS                                                           |
| 83821159     | Published   |               | 8/31/2011   |            | 11871524.2 EP      | EP | Thermal Shunt                                                                                         |
| 83948853     | Published   |               | 1/18/2012   |            | 12866023 EP        | EP | INTEGRATED SUB-WAVELENGTH GRATING ELEMENT                                                             |
| 83959971     | Published   |               | 1/31/2012   |            | 12867273 EP        | EP | OPTICAL ARCHITECTURES, OPTICAL DISTRIBUTION MATRICES, AND METHODS OF MANUFACTURING OPTICAL STRUCTURES |
| 84076052     | Published   |               | 6/28/2012   |            | 12880104 EP        | EP | Optical Shuffling                                                                                     |
| 84076172     | Published   |               | 7/26/2012   |            | 12881884.6 EP      | EP | OPTICAL ENGINE                                                                                        |
| 84158900     | Published   |               | 9/13/2012   |            | 12884528.6 EP      | EP | CONTROLLING TEMPERATURES IN OPTICAL CIRCUITS                                                          |
| 82914695     | Published   |               | 7/28/2009   |            | 9847904.1 EP       | EP | CONTROLLING CLOUD SERVICES                                                                            |
| 82240994     | Published   |               | 4/4/2008    |            | 8745153 EP         | EP | DC-TO-DC CONVERTER WITH INDEPENDENT COMPENSATION LOGIC                                                |
| 82405522     | Published   |               | 5/28/2008   |            | 8769755.3 EP       | EP | Impedance Correction                                                                                  |
| 83130000     | Published   |               | 5/30/2010   |            | 10852607 EP        | EP | Virtual Machine Code Injection                                                                        |
| 84115697     | Published   |               | 6/8/2012    |            | 12878548.2 EP      | EP | AUGMENTING MEMORY CAPACITY FOR KEY VALUE CACHE                                                        |
| 84247404     | Published   |               | 5/18/2015   |            | 12889067 EP        | EP | MEMORY CONTROLLERS TO FORM SYMBOLS BASED ON BURSTS                                                    |
| 83566658     | Published   |               | 8/25/2011   |            | 11871208.2 EP      | EP | Model-based stereoscopic and multiview cross-talk reduction                                           |

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| 84237929     | Application |               | 5/5/2015    |            | 12887323.9         | EP | CASE MANAGEMENT USING ACTIVE ENTITIES IN A SOCIAL NETWORK                                                            |
| 82203710     | Published   |               | 10/28/2005  |            | 5801721.1          | EP | Virtual Computing Infrastructure                                                                                     |
| 82203839     | Published   |               | 10/28/2005  |            | 5810956.2          | EP | Virtual Computing Infrastructure                                                                                     |
| 82929588     | Published   |               | 10/15/2009  |            | 9850473.1          | EP | A Hybrid Approach To Automated IT Change Planning                                                                    |
| 82929665     | Published   |               | 10/26/2009  |            | 9748459.6          | EP | Method And Apparatus For Selectively Routing Entanglement                                                            |
| 90022879     | Application |               | 2/28/2013   |            | 13876217.4         | EP | Building                                                                                                             |
| 83818508     | Published   |               | 11/16/2011  |            | 11876035.4         | EP | RESOURCE REFERENCE CLASSIFICATION                                                                                    |
| 84019770     | Application |               | 4/27/2012   |            | 12875325.8         | EP | Operation of Tape Drives                                                                                             |
| 84105887     | Published   |               | 5/22/2012   |            | 12877545.9         | EP | DATA CENTER SERVICE ORIENTED NETWORKING                                                                              |
| 90016078     | Application |               | 1/30/2013   |            | 13873553.5         | EP | ALTERNATING POWER SOURCES TO MANAGE INPUT POWER IN A CONVERTER                                                       |
| 90046360     | Application |               | 3/14/2013   |            | 13878273.5         | EP | UNIFIED CONTROL OF AN ELECTRONIC CONTROL SYSTEM AND A FACILITY CONTROL SYSTEM                                        |
| 90056885     | Application |               | 4/3/2013    |            | 13880749           | EP | SUPPORT MEMBER                                                                                                       |
| 82893478     | Published   |               | 7/31/2009   |            | 9847931.4          | EP | Disabling Counterfeit Cartridges                                                                                     |
| 83091099     | Published   |               | 4/30/2010   |            | 10850884.7         | EP | Controlling A Virtual Machine                                                                                        |
| 84076455     | Published   |               | 7/30/2012   |            | 12881997.6         | EP | Management Data Transfer Between Processors                                                                          |
| 84148300     | Published   |               | 8/24/2012   |            | 12883108.8         | EP | Detecting Defects in a Processor Socket                                                                              |
| 83507640     | Published   |               | 3/15/2011   |            | 11861016.1         | EP | DEDICATING RESOURCES OF A NETWORK PROCESSOR                                                                          |
| 82933916     | Published   |               | 10/28/2009  |            | 9850955.7          | EP | Network Switching Device for Quantifying Available Service-Level Capacity of a Network For Projected Network Traffic |
| 83222076     | Published   |               | 11/1/2010   |            | 10859347.6         | EP | Methods And Apparatus For Detection Of A Nat Device                                                                  |
| 83588862     | Published   |               | 4/19/2011   |            | 11863793.3         | EP | MANAGING MAC MOVES WITH SECURE PORT GROUPS                                                                           |
| 83991426     | Application |               | 4/30/2012   |            | 12875996.6         | EP | Computing A Performance Characteristic Of A Network Device                                                           |
| 83863420     | Application |               | 12/20/2011  |            | 11878301.8         | EP | CONVERGED FABRIC FOR FCoE                                                                                            |
| 83972803     | Published   |               | 2/2/2012    |            | 12867467.8         | EP | WIRELESS ACCESS POINT ALTERNATE SETTINGS                                                                             |
| 82910272     | Published   |               | 6/10/2010   |            | 10724506           | EP | SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION                                                                     |
| 83164624     | Published   |               | 7/20/2010   |            | 10855094.8         | EP | Cooling Apparatus                                                                                                    |
| 82104947     | Published   |               | 3/11/2004   |            | 4251408.3          | EP | FORMATTING SYSTEM MONITORING INFORMATION                                                                             |
| 83700286     | Published   |               | 7/26/2011   |            | 11869913.1         | EP | Data Search System And Method                                                                                        |
| 84273867     | Application |               | 1/29/2013   |            | 13873662.4         | EP | Job Plan Verification                                                                                                |
| 83214671     | Published   |               | 11/12/2010  |            | 10859444.1         | EP | RESTORATION OF A FILE SYSTEM OBJECT FROM RAW IMAGE BACKUP DATA                                                       |
| 83800111     | Published   |               | 8/31/2011   |            | 11871685.1         | EP | DETERMINE AUTHORIZATION OF A SOFTWARE PRODUCT BASED ON A FIRST AND SECOND AUTHORIZATION ITEM                         |
| 84041410     | Published   |               | 3/26/2012   |            | 12873442.3         | EP | PROVIDING APPLICATION CONTEXT FOR A CONVERSATION TOPOLOGICAL QUERY IN MULTI-TENANCY ENVIRONMENT                      |

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| 82060052     | Published   |               | 3/23/2001   |            | 1107261.8 EP       |    | Method, Computer System And Computer Program For Monitoring Services Of An Information Technology Environment |
| 82821367     | Application |               | 6/1/2009    |            | 9845628.8 EP       |    | System And Method For Collecting Application Performance Data                                                 |
| 83209550     | Published   |               | 12/20/2010  |            | 10860970.2 EP      |    | METHOD OF PROVISIONING ADDITIONAL STORAGE TO COMPUTER APPLICATIONS                                            |
| 83789792     | Application |               | 7/29/2011   |            | 11870306.5 EP      |    | MIGRATING VIRTUAL MACHINES                                                                                    |
| 83816161     | Published   |               | 9/24/2011   |            | 11872600.9 EP      |    | AUTOMATED DETECTION OF A SYSTEM ANOMALY                                                                       |
| 84312516     | Application |               | 1/31/2013   |            | 13873828.1 EP      |    | METHODS AND APPARATUS FOR DEBUGGING OF REMOTE SYSTEMS                                                         |
| 82926130     | Published   |               | 11/23/2009  |            | 9851543 EP         |    | System And Method For Object Identification In A User Interface                                               |
| 83185159     | Published   |               | 8/17/2010   |            | 10856232.3 EP      |    | PROVIDING AUTOMATION CODE CONTAINING A REPRESENTATION OF ALTERNATIVE INTERPRETATIONS OF A USER ACTION         |
| 83992714     | Application |               | 1/30/2013   |            | 13874158.2 EP      |    | ACQUIRING IDENTIFICATION OF AN APPLICATION LIFECYCLE MANAGEMENT ENTITY ASSOCIATED WITH SIMILAR CODE           |
| 83995671     | Published   |               | 4/30/2012   |            | 12876000.6 EP      |    | Prioritization of continuous deployment pipeline tests                                                        |
| 84046826     | Published   |               | 3/30/2012   |            | 12872649.7 EP      |    | SOFTWARE DEVELOPMENT ACTIVITY                                                                                 |
| 84125967     | Application |               | 7/27/2012   |            | 12881758.2 EP      |    | RECORDING EXTERNAL PROCESSES                                                                                  |
| 82578992     | Application |               | 6/13/2008   |            | 8771057 EP         |    | Hierarchical Policy Management                                                                                |
| 83721322     | Published   |               | 5/31/2011   |            | 11866810.2 EP      |    | AUTOMATED SECURITY TESTING                                                                                    |
| 84000271     | Published   |               | 2/29/2012   |            | 12870247.2 EP      |    | NETWORK SERVICE INTERFACE ANALYSIS                                                                            |
| 82580858     | Published   |               | 1/29/2009   |            | 7812463.3 EP       |    | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                                            |
| 83140874     | Application |               | 6/30/2010   |            | 10854214.3 EP      |    | SYSTEM AND METHOD FOR A SERIALIZED DATA SERVICE                                                               |
| 83992823     | Application |               | 5/27/2015   |            | 12889568.7 EP      |    | GENERIC RESOURCE PROVIDER FOR CLOUD SERVICE PLATFORM RUNTIME ABSTRACTION                                      |
| 83995608     | Application |               | 4/26/2012   |            | 12875211 EP        |    | CLOUD APPLICATION DEPLOYMENT PORTABILITY                                                                      |
| 84072001     | Application |               | 6/8/2012    |            | 12878517.7 EP      |    | Orchestrating Hybrid Cloud Services                                                                           |
| 84072877     | Application |               | 7/31/2012   |            | 12882089.1 EP      |    | Optimizing Placement of Virtual Machines                                                                      |
| 84117059     | Application |               | 6/29/2012   |            | 12879662.0 EP      |    | HYBRID CLOUD ENVIRONMENT                                                                                      |
| 84137265     | Application |               | 41190       |            | 12886486.5 EP      |    | GLOBAL FEATURE LIBRARY USEABLE WITH CONTINUOUS DELIVERY                                                       |
| 84155393     | Application |               | 8/30/2012   |            | 12883663.2 EP      |    |                                                                                                               |
| 82202090     | Published   |               | 10/27/2004  |            | 4793016.9 EP       |    | Data Distribution System, And Method Therefor                                                                 |
| 82219754     | Published   |               | 1/3/2007    |            | 7703598.8 EP       |    | Call Screening For VOIP Calls At Gateway                                                                      |

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| 83806291     | Published    |               | 1/31/2014   |            | 14290023.2 EP      | EP | FILTERING DATA FROM A DATABASE                                                                                                                                                                  |
| 83958170     | Application  |               | 6/4/2014    |            | 14 305 845.1 EP    | EP | PURCHASE SUPPORT                                                                                                                                                                                |
| 84114606     | Application  |               | 1/23/2015   |            | 15305070.3 EP      | EP | ELABORATION OF A GRAPHICAL REPRESENTATION IN A MODULE OF A WEB PAGE                                                                                                                             |
| 84272098     | Application  |               | 7/30/2015   |            | 15306239.3 EP      | EP | Web-application-launch application programming interfaces                                                                                                                                       |
| 90035308     | Acknowledged |               |             |            |                    | EP | Flexible and user-friendly layouts and widgets management mechanism for assembling and configuring advanced dashboards and views inside a web front-end WYSIWYG Graphical User Interface editor |
| 82651100     | Published    |               | 9/30/2008   |            | 8824049.4 EP       | EP | Authentication Of Services On A Partition                                                                                                                                                       |
| 82853026     | Published    |               | 3/25/2009   |            | 9842420.3 EP       | EP | POWER DISTRIBUTION UNIT-DEVICE CORRELATION                                                                                                                                                      |
| 82938304     | Published    |               | 12/1/2009   |            | 9851930.9 EP       | EP | POWER-CAP SETTINGS                                                                                                                                                                              |
| 84118539     | Application  |               | 12/11/2014  |            | EP14197500.3 EP    | EP | IP fragment steering method in multicpu/execution thread systems, using IP layer information, and first fragment used destination                                                               |
| 84210913     | Application  |               | 1/27/2013   |            | 13872559.3 EP      | EP | SOCKET STATE TRANSFER                                                                                                                                                                           |
| 82917033     | Published    |               | 6/4/2010    |            | 10802589.1 EP      | EP | APPARATUS, METHOD AND SYSTEM FOR MODIFYING PAGES                                                                                                                                                |
| 83127180     | Published    |               | 10/12/2010  |            | 10858489.7 EP      | EP | TRANSACTION PROCESSING SYSTEM AND METHOD                                                                                                                                                        |
| 82254029     | Published    |               | 5/6/2003    |            | 3736548.3 EP       | EP | Payment System And Method                                                                                                                                                                       |
| 82255406     | Published    |               | 5/21/2004   |            | 4785572.1 EP       | EP | SYSTEM AND METHOD FOR ELECTRONIC DOCUMENT SECURITY                                                                                                                                              |
| 83640286     | Published    |               | 4/7/2011    |            | 11863212.4 EP      | EP | METHOD AND APPARATUS FOR MOVING A SOFTWARE OBJECT                                                                                                                                               |
| 82256531     | Published    |               | 8/9/2006    |            | 6801158.4 EP       | EP | Enterprise Application Server System And Method                                                                                                                                                 |
| 82195844     | Published    |               | 4/26/2006   |            | 6758634.7 EP       | EP | Nanoscale Interconnection Interface                                                                                                                                                             |
| 82924255     | Published    |               | 9/4/2009    |            | 9849071.7 EP       | EP | MEMRISTORS BASED ON MIXED-METAL-VALENCE COMPOUNDS                                                                                                                                               |
| 83168700     | Published    |               | 8/30/2010   |            | 10856793.4 EP      | EP | Multilayer Memory Array                                                                                                                                                                         |
| 83778614     | Published    |               | 6/24/2011   |            | 11868115.4 EP      | EP | HIGH-RELIABILITY HIGH-SPEED MEMRISTOR                                                                                                                                                           |
| 83807339     | Published    |               | 8/3/2011    |            | 11870454.3 EP      | EP | NITRIDE-BASED MEMRISTORS                                                                                                                                                                        |
| 83960005     | Published    |               | 2/29/2012   |            | 12869691.1 EP      | EP | Memristor with Channel Region in Thermal Equilibrium with Containing Region                                                                                                                     |
| 84110962     | Published    |               | 7/27/2012   |            | 12881700.4 EP      | EP | DYNAMIC SENSE CIRCUITRY                                                                                                                                                                         |
| 90055225     | Acknowledged |               | 3/13/2013   |            |                    | EP | MEMRISTORS WITH DOPANT-COMPENSATED SWITCHING                                                                                                                                                    |
| 84103156     | Application  |               | 6/15/2012   |            | 12878839.5 EP      | EP | COMMUNICATING DATA ASSOCIATED WITH DIFFERENT PERSONAS OF A USER                                                                                                                                 |

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| 82207391     | Published    |               | 6/9/2006    |            | 6772824.6 EP       | EP | OPTICALLY COUPLED INTEGRATED CIRCUIT LAYERS                                          |
| 82230557     | Published    |               | 6/16/2008   |            | 8779658.7 EP       | EP | Optical Interconnect                                                                 |
| 82573310     | Published    |               | 5/6/2008    |            | 8755088.5 EP       | EP | SYSTEMS AND METHODS FOR ROUTING OPTICAL SIGNALS                                      |
| 82716633     | Published    |               | 10/31/2008  |            | 8877841 EP         | EP | Variably Configurable Computer Buses                                                 |
| 82805243     | Published    |               | 1/30/2009   |            | 9839424 EP         | EP | PLASMONIC LIGHT EMITTING DIODE                                                       |
| 82829674     | Published    |               | 2/23/2009   |            | 9840536.8 EP       | EP | DYNAMIC IMPEDANCE PHOTODETECTOR RECEIVER CIRCUIT                                     |
| 82930481     | Published    |               | 10/29/2009  |            | 9850968 EP         | EP | OPTICAL DATA BUS AND METHOD                                                          |
| 82931417     | Published    |               | 1/29/2010   |            | 10844884.6 EP      | EP | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER                                     |
|              |              |               |             |            |                    |    | ARRAYS                                                                               |
| 83791126     | Published    |               | 7/29/2011   |            | 11870224 EP        | EP | FIBER OPTICS CONNECTORS                                                              |
| 83930201     | Published    |               | 12/9/2011   |            | 11877086.6 EP      | EP | Control of Light Wavefronts                                                          |
| 83992365     | Published    |               | 4/18/2012   |            | 12874747.4 EP      | EP | FLEXIBLE CIRCUIT CABLE WITH FLOATING CONTACT                                         |
| 84068283     | Published    |               | 4/16/2012   |            | 12874816.7 EP      | EP | INTEGRATED OPTICAL SUB-ASSEMBLY                                                      |
| 90022759     | Application  |               | 7/31/2015   |            | 13873163.3 EP      | EP | RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH                                         |
| 83682161     | Published    |               | 4/29/2011   |            | 11864430.1 EP      | EP | SYSTEMS AND METHODS FOR IN-MEMORY PROCESSING OF EVENTS                               |
| 84022143     | Published    |               | 2/22/2012   |            | 12869523.6 EP      | EP | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM ON A COMPUTER                     |
| 84027722     | Published    |               | 2/23/2012   |            | 12869269.6 EP      | EP | Firmware Package to Modify Active Firmware                                           |
| 84290787     | Application  |               | 1/30/2013   |            | 13873874.1 EP      | EP | NON-VOLATILE MEMORY WRITE MECHANISM                                                  |
| 83055175     | Published    |               | 2/22/2011   |            | 11707954.1 EP      | EP | OPERATING ON TIME SEQUENCES OF DATA                                                  |
| 90022819     | Application  |               | 1/31/2013   |            | 13873960.2 EP      | EP | DETERMINING TRANSFERABILITY OF A COMPUTING RESOURCE TO A CLOUD COMPUTING ENVIRONMENT |
| 90065896     | Acknowledged |               | 3/28/2013   |            |                    | EP | SHIELD FOR AN ELECTRONIC DEVICE                                                      |
| 82172555     | Published    |               | 5/13/2004   |            | 4752379 EP         | EP | Redundant Data Assignment In A Data Storage System                                   |
| 82232177     | Published    |               | 7/30/2008   |            | 8794896.4 EP       | EP | Electronic System Having Free Space Optical Elements                                 |
| 82692033     | Application  |               | 10/31/2008  |            | 8877842.8 EP       | EP | Prioritized Optical Arbitration Systems And Methods                                  |
| 82925884     | Published    |               | 12/10/2009  |            | 9852137 EP         | EP | Fair Token Arbitration Systems And Methods                                           |
| 82929794     | Published    |               | 3/7/2011    |            | 11753881.9 EP      | EP | DATA STORAGE APPARATUS AND METHODS                                                   |
| 83164707     | Published    |               | 7/30/2010   |            | 10855177.1 EP      | EP | VISUAL SEPARATOR DETECTION IN WEB PAGES USING CODE ANALYSIS                          |
| 83168803     | Published    |               | 8/20/2010   |            | 10856042.6 EP      | EP | SYSTEMS AND METHODS FOR FILTERING WEB PAGE CONTENTS                                  |
| 84077663     | Application  |               | 5/31/2012   |            | 12877868.5 EP      | EP | LOCAL ERROR DETECTION AND GLOBAL ERROR CORRECTION                                    |
| 84077703     | Published    |               | 6/8/2012    |            | 12878350.3 EP      | EP | CHECKPOINTING USING FPGA                                                             |
| 84223030     | Published    |               | 5/1/2015    |            | 12887804.8 EP      | EP | Selective Error Correcting Code and Memory Access Granularity Switching              |

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| 84149044     | Published   |               | 7/31/2012   |            | 12882035.4         | EP | POWER EFFICIENT NETWORK WITH NETWORK CONTROL                                                               |
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| 83995797     | Published   |               | 3/12/2012   |            | 12871555.4         | EP | RACK COOLING SYSTEM WITH A COOLING SECTION                                                                 |
| 84072920     | Published   |               | 7/24/2012   |            |                    | EP | INITIATING A HELP FEATURE                                                                                  |
| 84156870     | Application |               | 9/25/2012   |            | 12885489           | EP | DISPLAYING INBOX ENTITIES AS A GRID OF FACETED TILES                                                       |
| 82066856     | Granted     | 815677        | 1/17/1997   | 3/16/2005  | 97900685.5         | FI | Multicarrier Communication System And Method For Peer Power Control                                        |
| 82168919     | Granted     | 118199        | 4/29/2004   | 8/15/2007  | 20040611           | FI | Multiple Protocol Database                                                                                 |
| 82201811     | Granted     | 1708459       | 3/29/2005   | 8/20/2008  | 5300226.7          | FI | Routing Element With Special Functions                                                                     |
| 82991027     | Granted     | 1725065       | 5/11/2006   | 5/23/2012  | 6113818.6          | FI | Controlling Access To Communication Services                                                               |
| 82211906     | Granted     | 1869864       | 4/3/2006    | 8/6/2008   | 6749186            | FI | Multimedia Transfer For Wireless Networks                                                                  |
| 82171190     | Granted     | 118246        | 9/27/2004   | 8/31/2007  | 20041244           | FI | Selective Message Discard                                                                                  |
| 82133597     | Granted     | 1188339       | 6/23/2000   | 11/24/2004 | 943160.2           | FI | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS    |
| 82168940     | Granted     | 123519        | 8/2/2004    | 6/14/2013  | 20041046           | FI | Software Authentication For Mobile Communication Devices                                                   |
| 82171682     | Granted     | 119348        | 1/11/2005   | 10/15/2008 | 20050028           | FI | Signal Gateway Aggregation                                                                                 |
| 81957101     | Granted     | 750254        | 6/11/1996   | 5/8/2002   | 96109347.3         | FR | Method And Apparatus For Providing Topology Based Enterprise Management Services                           |
| 82006844     | Granted     | 2845175       | 5/23/2003   | 3/24/2006  | 306225             | FR | A Method And System Of Switching Between Two Or More Images Of Firmware On A Host Device                   |
| 82019714     | Granted     | 903889        | 7/31/1998   | 4/4/2007   | 98306134.2         | FR | Internet Enabled Computer System Management                                                                |
| 82020962     | Granted     | 838923        | 10/7/1997   | 3/29/2006  | 97307976.7         | FR | Method And Apparatus For Automatic Device Segmentation And Port-to-segment Distribution                    |
| 82025009     | Granted     | 891064        | 6/9/1998    | 10/3/2007  | 98304565.9         | FR | Automatic Internet Protocol (IP) Address Allocation And Assignment                                         |
| 82041692     | Granted     | 961439        | 12/10/1998  | 3/8/2006   | 98123605.2         | FR | Network Management Event Storage And Manipulation Using Relational Database Technology In A Data Warehouse |
| 82043126     | Granted     | 1037145       | 11/30/1999  | 8/10/2005  | 99123777.7         | FR | Hybrid Just-in-time Compiler That Consumes Minimal Resource                                                |
| 82060085     | Granted     | 1320217       | 12/14/2001  | 10/13/2004 | 1129865            | FR | Method, System And Computer Program For Monitoring Objects In An It Network                                |
| 82062833     | Granted     | 1174728       | 7/10/2001   | 9/24/2008  | 1305936.5          | FR | Location Data Diffusion And Location Discovery                                                             |
| 82067762     | Granted     | 957484        | 5/12/1998   | 10/5/2005  | 98303691.4         | FR | Read After Write                                                                                           |
| 82068080     | Granted     | 1008048       | 8/28/1998   | 10/31/2001 | 98940428           | FR | Data Backup And Recovery System                                                                            |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|----------------------------------------------------------------------------------------------------------------------------------------|
| 82068533     | Granted     | 938053        | 2/19/1999   | 8/20/2003  | 99301223.6         | FR | Dynamic Index                                                                                                                          |
| 82068641     | Granted     | 1101164       | 8/6/1999    | 1/2/2003   | 99940291           | FR | System For Improved Data Backup And Recovery                                                                                           |
| 82069400     | Granted     | 1054530       | 4/19/2000   | 1/11/2006  | 303325.5           | FR | Loop Prevention In Networks                                                                                                            |
| 82070948     | Granted     | 1309220       | 10/31/2001  | 8/5/2009   | 1410142.2          | FR | Data Processing System And Method                                                                                                      |
| 82077320     | Granted     | 901672        | 4/24/1997   | 11/12/2003 | 97922458.1         | FR | System, Method And Article Of Manufacture For Network Electronic Authorization Utilizing An Authorization Instrument                   |
| 82082576     | Granted     | 1463049       | 10/17/2003  | 9/30/2009  | 3023651.7          | FR | Media Storage System And Method For Identifying A Storage Location Therein                                                             |
| 82085210     | Granted     | 1460630       | 10/9/2003   | 12/13/2006 | 3022914            | FR | High-density Media Storage System                                                                                                      |
| 82101548     | Granted     | 1465440       | 4/3/2003    | 7/9/2008   | 3290837.8          | FR | Methods And Apparatus For Controlling Processing Entities, Such As Distributed Signalling Gateways                                     |
| 82116089     | Granted     | 723238        | 1/23/1996   | 9/19/2001  | 96300429.6         | FR | RELATIONAL DATABASE SYSTEM AND METHOD WITH HIGH DATA AVAILABILITY DURING TABLE DATA RESTRUCTURING                                      |
| 82126886     | Granted     | 768599        | 10/4/1996   | 12/17/2003 | 96307279.8         | FR | ON-LINE DISK ARRAY RECONFIGURATION                                                                                                     |
| 82127453     | Granted     | 779579        | 12/12/1996  | 5/15/2002  | 96309071.7         | FR | BUS ERROR HANDLER FOR PER# & SERR# ON DUAL PCI BUS SYSTEM                                                                              |
| 82128833     | Granted     | 854613        | 12/30/1997  | 11/17/2004 | 97310663.6         | FR | A NETWORK SWITCH WITH A MULTIPLE BUS STRUCTURE AND A BRIDGE INTERFACE FOR TRANSFERRING NETWORK DATA BETWEEN DIFFERENT BUSES            |
| 82165235     | Granted     | 782301        | 12/23/1996  | 37706      | 96120819.6         | FR | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                                         |
| 82171838     | Application |               | 9/29/2005   |            | 509932             | FR | Processing Of Usage Data For First And Second Types Of Usage-based Functions                                                           |
| 82182014     | Granted     | 1548580       | 11/8/2004   | 6/13/2007  | 4256917.8          | FR | Non-platform-specific Unique Identifier Generation                                                                                     |
| 82186202     | Granted     | 1757065       | 5/13/2005   | 12/5/2007  | 5752784.8          | FR | Improvements In Message-based Communications                                                                                           |
| 82187771     | Granted     | 1784998       | 8/31/2005   | 2/18/2009  | 5784661            | FR | COMMUNICATIONS INFRASTRUCTURE FOR CONTENT DELIVERY USING EDGE SERVERS                                                                  |
| 82189082     | Granted     | 1775969       | 10/17/2005  | 5/5/2010   | 5300830.6          | FR | Communication System And Method                                                                                                        |
| 82190408     | Granted     | 1587106       | 3/17/2005   | 6/18/2008  | 5102120.2          | FR | Use Of Write Pass Value To Enable Detection Of Tampering With WORM Data                                                                |
| 82198433     | Granted     | 1812990       | 11/18/2005  | 4/15/2009  | 5851812.7          | FR | Composite Material With Controllable Resonant Cells                                                                                    |
| 82199939     | Granted     | 1681880       | 12/19/2005  | 11/18/2009 | 5027786.2          | FR | Data Retrieval From Computing Systems                                                                                                  |
| 82200131     | Granted     | 1777970       | 10/21/2005  | 7/28/2010  | 5300845.4          | FR | Communication System And Method                                                                                                        |
| 82200692     | Granted     | 1825654       | 10/31/2005  | 12/2/2009  | 5815495.6          | FR | Routing A Service Query In An Overlay Network                                                                                          |
| 82203203     | Granted     | 1708428       | 3/31/2005   | 39946      | 5300239            | FR | Multimedia Messaging During A Push-to-talk Session                                                                                     |
| 82206002     | Published   |               | 4/3/2006    |            | 602880             | FR | Distributed-State-Information-Based Distributed Computing Systems And Methods And Protocols For Managing Distributed State Information |

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| 82208984     | Granted | 1859602       | 10/31/2005  | 7/7/2010   | 5824597.8          | FR | Distributed Storing Of Network Position Information For Nodes                                                          |
| 82209071     | Granted | 1724971       | 3/10/2005   | 7/9/2008   | 5720467.9          | FR | Server System, Server Device And Method Therefor                                                                       |
| 82211864     | Granted | 1941696       | 7/20/2006   | 2/3/2010   | 6787976.7          | FR | Service Chaining                                                                                                       |
| 82215128     | Granted | 1892907       | 7/31/2006   | 4/22/2009  | 6300840.3          | FR | Signalling Gateway                                                                                                     |
| 82216121     | Granted | 1943757       | 1/30/2007   | 5/13/2009  | 7762845.1          | FR | Methods And Systems For Avoiding Transmission-channel Disruptions                                                      |
| 82219847     | Granted | 1811724       | 12/29/2006  | 8/12/2009  | 6027716            | FR | Determining Data Link (L2) Network Paths                                                                               |
| 82233221     | Granted | 1279100       | 4/3/2001    | 6/16/2004  | 1926566.9          | FR | USE OF A SINGLE THREAT TO SUPPORT MULTIPLE NETWORK CONNECTIONS FOR SERVER LOAD TESTING                                 |
| 82251590     | Granted | 811211        | 2/12/1996   | 10/16/2002 | 96906429.4         | FR | System and Method for Electronic Transfer of Funds Using An Automated Teller Machine to Dispense the Transferred Funds |
| 82252397     | Granted | 890155        | 2/24/1997   | 6/30/2004  | 97906748.5         | FR | Automated System for Selecting an Initial Computer Reservation System                                                  |
| 82252880     | Granted | 935786        | 10/29/1997  | 5/11/2005  | 97946866.7         | FR | Fail-Safe Event Driven Transaction Processing System and Method                                                        |
| 82253648     | Granted | 1409191       | 7/19/2002   | 8/23/2006  | 2752474.3          | FR | Method and System for Weld Process Monitoring                                                                          |
| 82254584     | Granted | 1545936       | 9/30/2003   | 8/4/2010   | 3799309.4          | FR | DRIVE-BY-WIRELESS VEHICLE CONTROL                                                                                      |
| 82255007     | Granted | 1573964       | 12/17/2003  | 6/21/2006  | 3814189.1          | FR | METHOD OF GUARANTEED DELIVERY OF SNMP TRAPS ACROSS A WIDE AREA NETWORK                                                 |
| 82256273     | Granted | 1745661       | 4/21/2005   | 9/1/2010   | 5737577.6          | FR | INTERNET MICRO CELL                                                                                                    |
| 82256567     | Granted | 1761797       | 5/3/2005    | 7/9/2008   | 5761078.4          | FR | System And Method For Wireless Asset Tracking                                                                          |
| 82267688     | Granted | 1040611       | 12/11/1998  | 6/5/2002   | 98967000.5         | FR | A Forward Error Correction System For Packet Based Real Time Media                                                     |
| 82268357     | Granted | 1076955       | 4/7/1999    | 1/21/2009  | 99915315.8         | FR | Point-To-Point Protocol With A Signaling Channel                                                                       |
| 82271180     | Granted | 1060593       | 11/30/1999  | 7/1/2009   | 99965063.3         | FR | Telecommunication Conferencing System And Method                                                                       |
| 82276988     | Granted | 1369766       | 6/4/2003    | 1/2/2008   | 3253538.7          | FR | Propagation Of Viruses Through An Information Technology Network                                                       |
| 82277795     | Granted | 1414227       | 10/24/2002  | 8/30/2006  | 2354169.1          | FR | Event Detection For Multiple Voice Channel Communications                                                              |
| 82277810     | Granted | 1379060       | 7/5/2002    | 3/4/2009   | 2354105.5          | FR | Improvements In Or Relating To DTMF Control                                                                            |
| 82392459     | Granted | 1428125       | 9/18/2002   | 11/3/2010  | 2775864.8          | FR | Monitoring In Component-based Systems At Runtime (as Amended)                                                          |
| 82576655     | Granted | 1760968       | 1/4/2003    | 10/27/2010 | 6023983.7          | FR | Network Units For Use In And Organisation Of Cascade Systems                                                           |
| 82579295     | Granted | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2          | FR | Pattern Discovery In A Network Security System                                                                         |
| 82603032     | Granted | 1665824       | 7/23/2004   | 3/2/2011   | 4766305.9          | FR | Methods And Apparatus For Controlling Signalling Gateways                                                              |
| 82635090     | Granted | 2013706       | 4/20/2007   | 7/6/2011   | 7755826            | FR | Self-authenticating Quantum Random Bit Generators                                                                      |

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| 82644401     | Granted | 1460440       | 10/9/2003   | 12/8/2010  | 3022910.8          | FR | Apparatus For Sensing The Presence Of An Inductive Load Driven By A Pulse Width Modulated Signal              |
| 82654150     | Granted | 1941701       | 7/20/2006   | 6/22/2011  | 6787972.6          | FR | Telephony And Web Services Coordination                                                                       |
| 82672110     | Granted | 1540502       | 8/11/2003   | 3/2/2011   | 3785167.2          | FR | Multi-level packet screening with dynamically selected filtering criteria                                     |
| 82675312     | Granted | 1632075       | 5/18/2004   | 9/14/2011  | 4733568.2          | FR | Method And Apparatus For Load-balancing.                                                                      |
| 82683513     | Granted | 1274259       | 7/6/2001    | 6/29/2011  | 1410085.3          | FR | Multi-service Telecommunications System And Associated Methods                                                |
| 82729619     | Granted | 1008859       | 11/15/1999  | 5/4/2011   | 99309055.4         | FR | Private Arbitrated Loop Self-test Management For A Fibre Channel Storage Enclosure                            |
| 82759497     | Granted | 1700446       | 11/5/2004   | 3/23/2011  | 4800797.5          | FR | PREVENTING IDENTITY THEFT IN ELECTRONIC COMMUNICATIONS                                                        |
| 82802866     | Granted | 1411703       | 10/11/2003  | 8/3/2011   | 3256431.2          | FR | Propagation Of Viruses Through An Information Technology Network                                              |
| 82847504     | Granted | 1859346       | 3/4/2005    | 1/11/2012  | 5733005.2          | FR | A Method And Apparatus For Facilitating Pipeline Throughput                                                   |
| 82855470     | Granted | 2301277       | 6/12/2009   | 10/12/2011 | 9761506.6          | FR | Improvements In Or Relating To Communications                                                                 |
| 82862039     | Granted | 2018734       | 4/18/2007   | 10/19/2011 | 7755684.3          | FR | Providing Different Network Services To A Network Agent                                                       |
| 82910729     | Granted | 2039121       | 7/10/2007   | 12/21/2011 | 7787337            | FR | METHOD OF PROVIDING SERVICES IN A NETWORK, NETWORK ELEMENT                                                    |
| 82924036     | Granted | 1839457       | 1/13/2006   | 1/11/2012  | 6704619.3          | FR | IMPROVEMENTS IN OR RELATING TO COMMUNICATION SYSTEMS                                                          |
| 82991029     | Granted | 1725065       | 5/11/2006   | 5/23/2012  | 6113818.6          | FR | Controlling Access To Communication Services                                                                  |
| 83009775     | Granted | 1249965       | 3/26/2001   | 5/30/2012  | 1107514            | FR | Method, Computer System, And Computer Program For Monitoring Objects Of An Information Technology Environment |
| 83013557     | Granted | 1885138       | 7/11/2006   | 6/6/2012   | 6300790            | FR | Signalling Gateway                                                                                            |
| 83057023     | Granted | 1428149       | 9/20/2002   | 11/7/2012  | 2768873.8          | FR | A System And Method For A Multi-node Environment With Shared Storage                                          |
| 83087105     | Granted | 942427        | 2/24/1999   | 6/27/2012  | 99301353.1         | FR | EOD IN MIC                                                                                                    |
| 83087119     | Granted | 2047319       | 7/11/2007   | 11/7/2012  | 7796825.3          | FR | Compact Systems For Generating Polarization-entangled Photons                                                 |
| 83087142     | Granted | 2215539       | 11/27/2007  | 1/2/2013   | 7871581            | FR | SYSTEM SYNTHESIS TO MEET AN ENERGY LOSS TARGET VALUE                                                          |
| 83092452     | Granted | 1378093       | 4/9/2001    | 8/8/2012   | 1921066.5          | FR | Authentication And Encryption Method And Apparatus For A Wireless Local Access Network                        |
| 83115114     | Granted | 1825640       | 12/6/2004   | 9/5/2012   | 4805930.7          | FR | Interconnect System For Supply Chain Management Of Virtual Private Network Services                           |
| 83115125     | Granted | 2008220       | 3/21/2007   | 9/5/2012   | 7759004            | FR | Service Management Framework                                                                                  |
| 83136099     | Granted | 2015553       | 7/10/2008   | 11/28/2012 | 8160071            | FR | Reverse Billing Of Messages Delivered To A Mobile Device                                                      |

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| 83139205     | Granted | 1484682       | 6/2/2003    | 12/5/2012  | 3291306.3          | FR | Method And Apparatus For Providing Support For An Electronic Device                                                                         |
| 83185302     | Granted | 1715488       | 12/17/1998  | 2/11/2009  | 6011296.8          | FR | Tape Leader Pin Assembly And Method For Making The Same                                                                                     |
| 83189524     | Granted | 1457007       | 12/17/2002  | 2/13/2013  | 2790678.3          | FR | System For Supply Chain Management Of Virtual Private Network Services                                                                      |
| 83242868     | Granted | EP2077029     | 9/18/2007   | 5/1/2013   | 7842678            | FR | IDENTIFYING A SUBNET ADDRESS RANGE FROM DNS INFORMATION                                                                                     |
| 83261199     | Granted | 913823        | 10/30/1998  | 5/22/2013  | 98308892.3         | FR | Data encoding method and apparatus                                                                                                          |
| 83266003     | Granted | 2055073       | 7/10/2007   | 5/15/2013  | 7787333.9          | FR | Interface Module                                                                                                                            |
| 83277109     | Granted | 1929818       | 7/18/2006   | 6/5/2013   | 6787730.8          | FR | Automated Application Server (AS) Permissions Provisioning                                                                                  |
| 83538874     | Granted | 2255263       | 2/20/2008   | 7/31/2013  | 8730240.2          | FR | Redriver With Two Reference Clocks And Method Of Operation Thereof                                                                          |
| 83683791     | Granted | 2427994       | 10/26/2009  | 9/25/2013  | 9743889.9          | FR | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same                                                     |
| 83694927     | Granted | 2013708       | 4/20/2007   | 10/16/2013 | 7775953.8          | FR | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                                         |
| 83748538     | Granted | 1858266       | 5/18/2006   | 11/13/2013 | 6300494.9          | FR | Method And Gateway For Sending Subsystem Allowed And Subsystem Prohibited SSCP Management Messages For Distributed SSCP Application Servers |
| 83781759     | Granted | 1220088       | 12/19/2001  | 6/3/2009   | 1310644.8          | FR | Circuit And Method For Supporting Misaligned Accesses In The Presence Of Speculative Load Instructions                                      |
| 83787161     | Granted | 2288996       | 4/28/2008   | 1/29/2014  | 8754129.8          | FR | Virtual-interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                                                              |
| 83787624     | Granted | 2460074       | 7/31/2009   | 12/31/2014 | 9847921.5          | FR | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                                          |
| 83808772     | Granted | 2245516       | 12/21/2007  | 2/12/2014  | 7869793.5          | FR | Moisture Content Control System                                                                                                             |
| 83809802     | Granted | 1676420       | 7/6/2004    | 3/5/2014   | 4766134.3          | FR | Improvements In Or Relating To Fault Tolerant Systems                                                                                       |
| 83821044     | Granted | 1592004       | 4/27/2005   | 3/12/2014  | 5103461.9          | FR | METHOD AND APPARATUS FOR RECORDING DATA ONTO A RECORDING MEDIUM INCLUDING WARNING OF THE APPROACH TO AN END OF MEDIUM POSITION              |
| 83874025     | Granted | 2248230       | 2/29/2008   | 4/16/2014  | 8731153.6          | FR | Modular System And Retractable Assembly For Electronic Devices                                                                              |
| 83874314     | Granted | 2255291       | 2/18/2008   | 4/16/2014  | 8730074.5          | FR | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device                                             |
| 83928526     | Granted | 2359534       | 12/15/2008  | 5/7/2014   | 8879013.4          | FR | Detecting An Unreliable Link In A Computer System                                                                                           |
| 84022110     | Granted | 2260611       | 3/31/2008   | 8/20/2014  | 8742453.7          | FR | Automated Power Topology Discovery                                                                                                          |
| 84038203     | Granted | 2386150       | 1/9/2009    | 9/17/2014  | 9837743.5          | FR | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                                   |

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| 84058055     | Granted      | 2460105       | 7/30/2009   | 10/1/2014  | 9847912.4          | FR | Constructing A Bayesian Network Based On Received Events Associated With Network Entities                |
| 84067463     | Granted      | 2324440       | 8/7/2008    | 10/8/2014  | 8797322.8          | FR | Providing Data Structures For Determining Whether Keyframes An Index Are Present In A Storage System     |
| 84105772     | Granted      | 2480977       | 9/25/2009   | 11/5/2014  | 9849912.2          | FR | MAPPING NON-PREFETCHABLE STORAGE LOCATIONS INTO MEMORY MAPPED INPUT/OUTPUT SPACE                         |
| 84109791     | Granted      | 1784962       | 7/26/2005   | 4/8/2015   | 5775235.4          | FR | System, Method, And Computer Program Product For Content Delivery In A Push-to-talk Communication System |
| 84118592     | Granted      | 2277311       | 5/20/2009   | 2/25/2015  | 9751488.9          | FR | Apparatus And Method For Recording Video Data                                                            |
| 84119239     | Granted      | 1748621       | 7/5/2006    | 42004      | 6253519            | FR | Computer System Polling                                                                                  |
| 84191605     | Application  | 2166703       | 9/21/2009   |            | 9170876.8          | FR | Method And System For Managing A Hierarchical Information Base With An Application Layer Protocol        |
| 84210534     | Granted      | EP1909178     | 6/6/2007    | 4/8/2015   | 7252277.4          | FR | Transactional Shared Memory System And Method Of Control                                                 |
| 84211159     | Granted      | 2248029       | 2/26/2008   | 4/8/2015   | 8726109.5          | FR | Method And Apparatus For Performing A Host Enumeration Process                                           |
| 84251694     | Granted      | 2143259       | 1/29/2008   | 5/27/2015  | 8708351.5          | FR | Method And System For Facilitating Multi-point Communications                                            |
| 84290586     | Granted      | 2622487       | 40814       | 42200      | 11833057           | FR | HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION                                                   |
| 90031010     | To Be Filed  |               |             |            |                    | FR | Release tracking based on Gerrit                                                                         |
| 90037712     | Granted      | 2176773       | 39636       | 42249      | 8808136.9          | FR | Data Packet Processing Method For A Multi Core Processor                                                 |
| 90050982     | Acknowledged |               |             |            |                    | FR | Processing Of Usage Data For First And Second Types Of Usage-based Functions                             |
| 82181885     | Granted      | 2871256       | 5/17/2005   | 9/18/2009  | 504922             | FR | Storage Device Flow Control                                                                              |
| 82127627     | Granted      | 811931        | 6/4/1997    | 5/2/2003   | 97303797.1         | FR | EXPANSION CARD INSERTION AND REMOVAL                                                                     |
| 82275410     | Granted      | 916202        | 3/4/1998    | 8/29/2001  | 98910176.1         | FR | System And Method For Determining End to End Characteristics Of A Data Communications Channel            |
| 82721357     | Granted      | 985298        | 5/28/1998   | 3/30/2011  | 98923848           | FR | Method And Apparatus For Providing Security In A Star Network Connection Using Public Key Cryptography   |
| 82068320     | Granted      | 1066634       | 4/1/1998    | 12/12/2001 | 98913957.1         | FR | AFN Append Point                                                                                         |
| 82810949     | Granted      | 1221609       | 1/3/2002    | 8/31/2011  | 2250028.4          | FR | A Method For Sensing Humidity In A Tape Library                                                          |
| 83240729     | Granted      | 913825        | 10/30/1998  | 5/1/2013   | 98308912.9         | FR | Data Encoding Scheme                                                                                     |
| 82186751     | Granted      | 1528745       | 10/30/2003  | 12/2/2009  | 3292712.1          | FR | Communication Method And Apparatus                                                                       |
| 82212599     | Granted      | 1874065       | 6/30/2006   | 12/29/2010 | 6300735.5          | FR | SIGNALING SYSTEM AND METHOD                                                                              |
| 82230896     | Granted      | 1986397       | 4/11/2008   | 8/4/2010   | 8103499.3          | FR | REDUCING A NUMBER OF REGISTRATION TERMINATION MESSAGES IN A NETWORK FOR CELLULAR DEVICES                 |
| 83192843     | Granted      | 1875661       | 4/10/2006   | 2/27/2013  | 6743275.7          | FR | IMPROVEMENTS IN OR RELATING TO COMMUNICATIONS                                                            |

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|--------------|---------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82116143     | Granted | 723231        | 1/15/1996   | 7/11/2001  | 96300261.3         | FR | METHOD AND APPARATUS FOR PREVENTING INADVERTENT CHANGES TO SYSTEM-CRITICAL FILES IN A COMPUTING SYSTEM                                                       |
| 82229831     | Granted | 852910        | 4/30/2008   | 12/12/2014 | 852910             | FR | PRE-CONFIGURED PARTITIONS WITH USE-RIGHTS LIMITATIONS                                                                                                        |
| 83146743     | Granted | 2352953       | 11/13/2009  | 1/2/2013   | 9775127.5          | FR | Data Centre And Apparatus And Method For Data Centre Cooling                                                                                                 |
| 82004387     | Granted | 1495270       | 4/16/2003   | 3/12/2008  | 3724032.2          | FR | Using Pattern Recognition Techniques For Energy Management In Large Data Centers                                                                             |
| 82042220     | Granted | 1056086       | 4/18/2000   | 6/22/2005  | 303272.9           | FR | Modular Data Storage System Utilizing A Wireless Cartridge Access Device                                                                                     |
| 82253492     | Granted | 1436956       | 10/15/2002  | 12/10/2008 | 2793789.5          | FR | Method And System For Communicating Telematics Messages                                                                                                      |
| 82255868     | Granted | 1700286       | 10/29/2004  | 5/2/2007   | 4796875.5          | FR | BOUNDARY DETECTION ALGORITHM FOR EMBEDDED DEVICES                                                                                                            |
| 82065197     | Granted | 1237332       | 3/2/2001    | 11/5/2003  | 1301921.1          | FR | Beacon Based Web Services II                                                                                                                                 |
| 82105844     | Granted | 1471680       | 4/21/2004   | 6/21/2006  | 4252330.8          | FR | Cryptographic Method And Apparatus                                                                                                                           |
| 83835721     | Granted | 2126770       | 1/21/2008   | 3/19/2014  | 8702121.8          | FR | TRUSTED COMPUTING ENTITIES                                                                                                                                   |
| 82218845     | Granted | 1977427       | 1/26/2007   | 3/3/2010   | 7709841.6          | FR | Mixed-scale Electronic Interface                                                                                                                             |
| 90031084     | Granted | 2686883       | 3/29/2011   | 7/1/2015   | 11862142.4         | FR | DUAL-PLANE MEMORY ARRAY                                                                                                                                      |
| 83542271     | Granted | 2137888       | 4/2/2008    | 8/21/2013  | 8742575.7          | FR | Available Bandwidth Estimation                                                                                                                               |
| 82207418     | Granted | 1938429       | 7/21/2006   | 9/30/2009  | 6788057.5          | FR | Method And Apparatus For Electromagnetic Resonance Using Negative Index Material                                                                             |
| 83593523     | Granted | 913824        | 10/30/1998  | 8/14/2013  | 98308901.2         | FR | Generating appendable points in encoded data                                                                                                                 |
| 82586618     | Granted | 1777875       | 10/21/2005  | 1/12/2011  | 5109861.4          | FR | Graphical Arrangement Of IT Network Components                                                                                                               |
| 83217119     | Granted | 1394679       | 8/30/2002   | 5/29/2013  | 2354124.6          | FR | Improvements Relating To Technical Support Systems                                                                                                           |
| 82103648     | Granted | 1560225       | 6/28/2004   | 2/4/2009   | 4015147.4          | FR | Method And Apparatus For Reducing Soft Errors                                                                                                                |
| 82786340     | Granted | 869426        | 3/30/1998   | 7/13/2011  | 98302442.3         | FR | APPARATUS AND METHOD FOR STORAGE SUBSYSTEM DRIVE MOVEMENT AND VOLUME ADDITION                                                                                |
| 82180940     | Granted | 2865089       | 1/10/2005   | 9/7/2007   | 500209             | FR | Successful Transactions                                                                                                                                      |
| 84115803     | Granted | 2486487       | 10/7/2009   | 12/3/2014  | 9850311.3          | FR | Notification Protocol Based Endpoint Caching Of Host Memory                                                                                                  |
| 82036910     | Granted | 967758        | 4/8/1999    | 11/30/2005 | 99302754.9         | FR | Link Control State Machine For Controlling A Media Access Controller, A Serial Physical Layer Device And A Media Independent Interface Physical Layer Device |
| 82266593     | Granted | 990206        | 5/28/1998   | 10/25/2006 | 98924930.5         | FR | Multilayer Firewall System                                                                                                                                   |
| 82723764     | Granted | 1303100       | 8/13/2002   | 6/29/2011  | 2255636.9          | FR | Reduced Pin-count System Interface For Gigabit Ethernet Physical Layer Devices                                                                               |
| 81978722     | Granted | 1195942       | 4/5/2001    | 11/14/2007 | 1108610.5          | FR | Device Detection System And Method                                                                                                                           |
| 82005005     | Granted | 1383121       | 7/11/2003   | 5/12/2010  | 3254395.1          | FR | Intrusion Monitors For Media Storage Systems                                                                                                                 |

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| 82251989     | Granted | 1108238       | 7/15/1999   | 1/17/2007  | 99934061.5         | FR | System And Method For Selectively Defining Access To Application Features                                                                          |
| 83120016     | Granted | 2361465       | 10/15/2008  | 8/29/2012  | 8875183.9          | FR | Retrieving Configuration Records From A Configuration Management Database                                                                          |
| 82071062     | Granted | 1309142       | 10/30/2001  | 6/20/2007  | 1410140.6          | FR | Communication System And Method                                                                                                                    |
| 82100465     | Granted | 1414194       | 10/22/2002  | 12/13/2006 | 2354168.3          | FR | Method And Apparatus For Operating A Telecommunication Platform                                                                                    |
| 82211909     | Granted | 1869864       | 4/3/2006    | 8/6/2008   | 6749186            | FR | Multimedia Transfer For Wireless Networks                                                                                                          |
| 82051514     | Granted | 1130491       | 12/4/2000   | 3/8/2006   | 310771.1           | FR | Method And Apparatus For Providing Field Confidentiality In Digital Certificates                                                                   |
| 82128182     | Granted | 811932        | 6/4/1997    | 4/9/2003   | 97303798.9         | FR | CONNECTING EXPANSION CARDS                                                                                                                         |
| 82277957     | Granted | 1526679       | 10/21/2003  | 6/27/2007  | 3292628.9          | FR | Methods Relating To The Monitoring Of Computer Systems                                                                                             |
| 82257107     | Granted | 2024950       | 4/27/2007   | 6/2/2010   | 7761477.4          | FR | In-transit Two-way Route Communication Between A Handheld Positioning Device And A Service Provider                                                |
| 82208225     | Granted | 1720315       | 4/27/2006   | 7/9/2008   | 6113237.9          | FR | Network Management And Administration                                                                                                              |
| 82277210     | Granted | 1378821       | 7/1/2003    | 1/28/2009  | 3254190.6          | FR | Authentication Method And Apparatus Using Pairing Functions For The Elliptic Curves Based Cryptosystems                                            |
| 82810920     | Granted | 1961009       | 11/1/2006   | 1/4/2012   | 6844255.7          | FR | Crossbar-array Designs And Wire Addressing Methods That Tolerate Misalignment Of Electrical Components With Wires At Wire Overlap Points           |
| 83087135     | Granted | 1805767       | 10/14/2005  | 12/5/2012  | 5810496.9          | FR | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
| 82729652     | Granted | 1558937       | 11/7/2003   | 8/24/2011  | 3783255.7          | FR | Active Network Defense System and Method                                                                                                           |
| 83988218     | Granted | 2321934       | 10/28/2009  | 6/25/2014  | 9752028.2          | FR | Distributed Packet Flow Inspection and Processing                                                                                                  |
| 82090715     | Granted | 1480223       | 1/19/2004   | 3/25/2009  | 4001012.6          | FR | Modular Storage Library With Automatic Configuration                                                                                               |
| 82903955     | Granted | 1684291       | 6/2/2005    | 4/11/2012  | 5104797.5          | FR | Non Unique Fragment Number Identifiers                                                                                                             |
| 84155339     | Granted | 2497023       | 11/2/2009   | 2/25/2015  | 9850993.8          | FR | Multiprocessing Computing With Distributed Embedded Switching                                                                                      |
| 90064660     | Granted | 2465030       | 8/11/2009   | 10/7/2015  | 9848324.1          | FR | Enclosure Airflow Controller                                                                                                                       |
| 82129484     | Granted | 848316        | 12/11/1997  | 5/8/2002   | 97310024.1         | FR | SYSTEM AND METHOD FOR SECURE INFORMATION OVER A NETWORK                                                                                            |
| 84172780     | Granted | 2350842       | 10/30/2008  | 2/25/2015  | 8877865.9          | FR | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                                                                               |
| 82266338     | Granted | 855115        | 10/11/1996  | 7/6/2005   | 96936429.8         | FR | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS                                             |
| 83050464     | Granted | 836306        | 10/10/1996  | 7/4/2012   | 96410106.7         | FR | System Providing For Multiple Virtual Circuits Between Two Network Entities                                                                        |

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| 82274144     | Granted | 1527626       | 6/30/2003   | 6/2/2010   | 376222.2           | FR | System and Method for a Universal Wireless Access Gateway                                                              |
| 81978902     | Granted | 1239479       | 1/28/2002   | 10/12/2005 | 2250543.2          | FR | Apparatus And Method For Retrieving Data Cartridge Information External To A Media Storage System                      |
| 83164607     | Granted | 1846867       | 1/20/2006   | 1/9/2013   | 6719098.3          | FR | Non-invasive Method And System For Automated Administration Of Diverse Security Constrained Servers                    |
| 82951108     | Granted | 2212806       | 11/13/2008  | 6/27/2012  | 8851440.1          | FR | Allocation Of Resources For Concurrent Query Execution Via Adaptive Segmentation                                       |
| 83810193     | Granted | 1884872       | 7/13/2007   | 2/26/2014  | 7013794.8          | FR | Method And System For Using Application Development Data To Instantiate Support Information                            |
| 82060067     | Granted | 1257087       | 5/10/2001   | 9/12/2007  | 1111444.4          | FR | Method, Computer System And Computer Program For Monitoring Objects In An IT Network                                   |
| 82186739     | Granted | 1706978       | 7/12/2004   | 9/10/2008  | 4766194.7          | FR | Method And Apparatus For Load-balancing                                                                                |
| 82281446     | Granted | 1553723       | 1/5/2005    | 3/14/2007  | 5250014.7          | FR | Method And System For Modelling A Communications Network                                                               |
| 83538243     | Granted | 1592217       |             | 10/16/2013 |                    | FR | Method And Apparatus For Providing A Specialized Resource Function In A Telephone Network                              |
| 82198538     | Granted | 1605626       | 6/6/2005    | 12/26/2007 | 5104894            | FR | Cryptographic Method And Apparatus                                                                                     |
| 82077356     | Granted | 907935        | 4/24/1997   | 8/24/2005  | 97922456.5         | FR | A System And Method For Secure Network Electronic Payment And Credit Collection                                        |
| 83800541     | Granted | 2031822       | 12/12/2002  | 2/12/2014  | 8017098.8          | FR | System And Method For Managing Wireless Vehicular Communications                                                       |
| 82253225     | Granted | 1381945       | 4/23/2002   | 6/13/2007  | 2726784.8          | FR | Method and System for Reporting XML Data Based on Precomputed Context and a Document Object Model                      |
| 82128617     | Granted | 825536        | 8/13/1997   | 2/5/2003   | 97306154.2         | FR | A SERVER CONTROLLER CONFIGURED TO SNOOP AND RECEIVE A DUPLICATIVE COPY OF DISPLAY DATA PRESENTED TO A VIDEO CONTROLLER |
| 83985776     | Granted | 2368268       | 12/23/2008  | 7/9/2014   | 8879253.6          | FR | Memristive Device And Methods Of Making And Using The Same                                                             |
| 84022793     | Granted | 2374250       | 1/19/2009   | 10/29/2014 | 9838521.4          | FR | Load Balancing                                                                                                         |
| 84016656     | Granted | 1977572       | 1/23/2007   | 8/27/2014  | 7762485.6          | FR | Compute Clusters Employing Photonic Interconnections For Transmitting Optical Signals Between Compute Cluster Nodes    |
| 84212966     | Granted | 2080048       | 5/4/2009    | 3/4/2015   | 7839603.3          | FR | Photonic-interconnect Systems For Reading Data From Memory Cells And Writing Data To Memory Integrated Circuits        |
| 82097837     | Granted | 1466234       | 11/21/2003  | 5/24/2006  | 3812445.9          | FR | Cooling System With Evaporators Distributed In Series                                                                  |
| 83505402     | Granted | 2313830       | 8/13/2008   | 10/2/2013  | 8795330.3          | FR | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                   |
| 82071353     | Granted | 1329809       | 1/18/2002   | 8/6/2008   | 2354007.3          | FR | Distributed Computing System And Method                                                                                |

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| 82277132     | Granted     | 1355445       | 3/28/2003   | 10/17/2007 | 3251967            | FR | Method And Apparatus For Encrypting/decrypting Data                                                                                                                                                                               |
| 84038164     | Application |               | 10/31/2014  |            | 1460537            | FR | MANAGEMENT OF CRYPTOGRAPHIC KEYS                                                                                                                                                                                                  |
| 82900680     | Granted     | 1324172       | 12/19/2002  | 2/8/2012   | 2258777            | FR | System And Method For Securing Fiber Channel Drive Access<br>In A Partitioned Data Library                                                                                                                                        |
| 82071044     | Granted     | 1265144       | 6/8/2001    | 3/29/2006  | 1410070            | FR | A Method Of Providing Access To Computer Configuration Information To An Interested Party, An Arrangement Apparatus For Providing Remote Support To A Computer User, And Apparatus For Obtaining Remote Support For Computer User |
| 83874489     | Granted     | 1741139       | 4/25/2005   | 7/16/2014  | 5740296            | FR | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures                                                                                                                                           |
| 82102319     | Granted     | 1413893       | 10/17/2003  | 9/28/2005  | 3256580            | FR | System And Method Of Measuring Low Impedances                                                                                                                                                                                     |
| 82128734     | Granted     | 854611        | 12/30/1997  | 12/15/2004 | 97310656           | FR | NETWORK SWITCH WITH MULTIPLE BUS ARCHITECTURE                                                                                                                                                                                     |
| 82025402     | Granted     | 907123        | 3/26/1998   | 5/26/2004  | 98105536           | FR | System And Method For Reporting Available Capacity In A Data Storage System With Variable Consumption Characteristics                                                                                                             |
| 82066859     | Granted     | 815677        | 1/17/1997   | 3/16/2005  | 97900685           | FR | Multicarrier Communication System And Method For Peak Power Control                                                                                                                                                               |
| 82037951     | Granted     | 1014622       | 12/20/1999  | 8/3/2005   | 99310273           | FR | Network Appliance Combining Asynchronous Notification With Interactive Network Transfer Protocol Server                                                                                                                           |
| 82267331     | Granted     | 964814        | 8/22/1996   | 1/24/1997  | 964814             | FR | Enclosure For Electronic Circuitry                                                                                                                                                                                                |
| 82061681     | Granted     | 1162537       | 6/9/2000    | 9/26/2007  | 304891             | FR | Utilization Of Unused Disk Space On Networked Computers                                                                                                                                                                           |
| 81996500     | Granted     | 1385162       | 6/19/2003   | 9/12/2007  | 3253874            | FR | Cartridge-handling Apparatus                                                                                                                                                                                                      |
| 82068482     | Granted     | 945800        | 3/2/1998    | 7/16/2003  | 98301498           | FR | Enhancing Reliability                                                                                                                                                                                                             |
| 83873530     | Granted     | 2249542       | 4/8/2010    | 4/2/2014   | 10159409           | FR | Communicating Confidential Information Between An Application And A Database                                                                                                                                                      |
| 81956546     | Granted     | 750253        | 6/11/1996   | 4/3/2002   | 96109337           | FR | Method And Apparatus For Shared Management Information Via A Common Repository                                                                                                                                                    |
| 82038020     | Granted     | 961197        | 12/10/1998  | 8/13/2003  | 98123600           | FR | User Interface Mechanism For Manipulating Context In Computer Management Applications                                                                                                                                             |
| 82062863     | Granted     | 1215656       | 11/30/2001  | 6/15/2005  | 1310044            | FR | Idiom Handling In Voice Service Systems                                                                                                                                                                                           |
| 82097075     | Granted     | 1757111       | 6/13/2005   | 4/28/2010  | 5754562            | FR | Method And System For Establishing Communications                                                                                                                                                                                 |
| 82133600     | Granted     | 1188339       | 6/23/2000   | 11/24/2004 | 943160             | FR | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS                                                                                                                           |
| 82197653     | Granted     | 1643777       | 10/4/2004   | 6/17/2009  | 4300652            | FR | Methods And Apparatus For Controlling Signalling Gateways                                                                                                                                                                         |
| 82198595     | Granted     | 1686813       | 1/31/2005   | 7/16/2008  | 5300075            | FR | Signalling Point                                                                                                                                                                                                                  |
| 82392128     | Granted     | 1617410       | 7/11/2005   | 11/24/2010 | 5254326            | FR | Allocation Of Speech Recognition Tasks And Combination Of Results Thereof                                                                                                                                                         |

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| 83004398     | Granted | 1202176       | 10/31/2000  | 4/25/2012  | 410131.7           | FR | Message-based Software System                                                                                                           |
| 83221475     | Granted | 1650990       | 10/20/2004  | 4/17/2013  | 4300698            | FR | METHOD AND APPARATUS FOR ROUTING SHORT MESSAGES                                                                                         |
| 83806254     | Granted | 1622349       | 7/12/2005   | 2/13/2014  | 5254353.5          | FR | MOBILE TELEPHONE NETWORKS                                                                                                               |
| 83929723     | Granted | 1986409       | 3/13/2008   | 5/7/2014   | 8004715.2          | FR | Teleconference Audio Quality Monitoring                                                                                                 |
|              |         |               |             |            |                    |    | A Method, Apparatus And Software For Providing Communications Between A Packet Switched Network And A Public Switched Telephone Network |
| 84196120     | Granted | 2597899       | 10/13/2011  | 4/1/2015   | 11306325.9         | FR | Optimizing telephony numbers for Machine 2 Machine Communications using Round Robin Assignment Technique                                |
| 82077476     | Granted | 919048        | 6/17/1997   | 8/25/2004  | 97933142.8         | FR | A System, Method And Article Of Manufacture For Multiple-Entry Point Virtual Point Of Sale Architecture                                 |
| 82256843     | Granted | 1836693       | 1/10/2006   | 7/1/2009   | 6717875.6          | FR | RHID VEHICLE MANAGEMENT SYSTEM AND METHOD                                                                                               |
| 82254281     | Granted | 1504376       | 5/7/2003    | 40191      | 3726681.4          | FR | Data Archive Recovery                                                                                                                   |
| 82743832     | Granted | 1875476       | 4/25/2006   | 7/27/2011  | 6751576.7          | FR | Three-dimensional Nanoscale Crossbars                                                                                                   |
| 82997365     | Granted | 2096672       | 1/26/2007   | 8/3/2011   | 9006878.4          | FR | MIXED-SCALE ELECTRONIC INTERFACE                                                                                                        |
| 83781697     | Granted | 2311094       | 7/31/2008   | 1/1/2014   | 8794914.5          | FR | MULTI-LAYER RECONFIGURABLE SWITCHES                                                                                                     |
| 82678694     | Granted | 2013707       | 4/20/2007   | 7/6/2011   | 7755829.4          | FR | Optical-based, Self-authenticating Quantum Random Number Generators                                                                     |
| 82866219     | Granted | 1220092       | 12/19/2001  | 6/15/2011  | 1310645.5          | FR | System And Method For Executing Variable Latency Load Operations In A Data Processor                                                    |
| 81953474     | Granted | 735522        | 3/22/1996   | 5/19/1999  | 96302014.4         | GB | Disk Data Recording Device                                                                                                              |
| 81970649     | Granted | 2390776       | 7/4/2003    | 9/21/2005  | 315749.2           | GB | An Object-Oriented, Multi-Threaded Scheduler For Automated Network Discovery And Polling                                                |
| 81971756     | Granted | 2378787       | 4/29/2002   | 7/20/2005  | 209764             | GB | Internet Transaction Performance Monitor                                                                                                |
| 81971807     | Granted | 2377524       | 4/23/2002   | 6/22/2005  | 209246.8           | GB | Method And Apparatus To Extract The Health Of A Service From A Host Machine                                                             |
| 81977063     | Granted | 2380311       | 7/30/2002   | 10/12/2005 | 217627.9           | GB | Disk Cartridge Data Storage Methods And Apparatus                                                                                       |
| 81977369     | Granted | 2370720       | 10/17/2001  | 1/5/2005   | 124940.8           | GB | System And Method For Determining Probable Network Paths Between Nodes In A Network Topology                                            |
| 81978698     | Granted | 1229448       | 1/9/2002    | 3/29/2006  | 2250150.6          | GB | Redundant Backup Device                                                                                                                 |
| 81980246     | Granted | 2376325       | 3/11/2002   | 5/4/2005   | 205682.8           | GB | System And Method Utilizing On-chip Voltage Controlled Frequency Modulation To Manage Power Consumption                                 |
| 81985130     | Granted | 2375919       | 4/9/2002    | 6/16/2004  | 208167.7           | GB | Method And System For Consolidating Network Topology In Duplicate IP Networks                                                           |
| 81990623     | Granted | 1308955       | 10/25/2002  | 8/18/2010  | 2257423            | GB | Virtual Electronic Data Library Supporting Mixed Drive Types Using Virtual Libraries Within A Single Library                            |
| 81993038     | Granted | 2385205       | 9/24/2002   | 6/22/2005  | 222169.5           | GB | Low Profile PCI Hot Plug Actuator Assembly                                                                                              |
| 81993365     | Granted | 2380294       | 7/30/2002   | 9/14/2005  | 217622             | GB | Dedicated Server Management Card With Hot Swap Functionality                                                                            |

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| 81993533     | Granted | 2375632       | 3/8/2002    | 3/23/2005  | 205556.4           | GB | Redundant Controller Data Storage System Having An Operating Controller Removal System And Method          |
| 81993914     | Granted | 2380839       | 7/30/2002   | 9/14/2005  | 217626.1           | GB | System And Method For Power Management In A Server System                                                  |
| 81994799     | Granted | 1288937       | 8/22/2002   | 5/30/2007  | 2255883.7          | GB | Systems And Methods For Providing Automatic Access To Data Media In A Data Storage System                  |
| 81995789     | Granted | 2415530       | 6/20/2002   | 2/15/2006  | 518974.1           | GB | System And Method For File System Mandatory Access Control                                                 |
| 81996494     | Granted | 1385162       | 6/19/2003   | 9/12/2007  | 3253874.6          | GB | Cartridge-handling Apparatus                                                                               |
| 82006040     | Granted | 2389459       | 4/2/2003    | 6/22/2005  | 307635.3           | GB | Method And Apparatus For Supporting A Circuit Component                                                    |
| 82006235     | Granted | 2387974       | 4/22/2003   | 1/4/2006   | 309114.7           | GB | Wrap-Around Cooling Arrangement For Printed Circuit Board                                                  |
| 82008596     | Granted | 2048315       | 6/21/1995   | 11/9/1995  | 2048315            | GB | Control Module For A Computer Peripheral Such As A Media Autochanger                                       |
| 82019717     | Granted | 903889        | 7/31/1998   | 4/4/2007   | 98306134.2         | GB | Internet Enabled Computer System Management                                                                |
| 82020965     | Granted | 838923        | 10/7/1997   | 3/29/2006  | 97307976.7         | GB | Method And Apparatus For Automatic Device Segmentation And Port-To-Segment Distribution                    |
| 82025006     | Granted | 891064        | 6/9/1998    | 10/3/2007  | 98304565.9         | GB | Automatic Internet Protocol (IP) Address Allocation And Assignment                                         |
| 82037360     | Granted | 1063648       | 5/23/2000   | 8/18/2004  | 111113.7           | GB | Laterally Expandable Modular Data Storage System                                                           |
| 82037378     | Granted | 997896        | 10/21/1999  | 1/4/2006   | 993088294          | GB | Mail Slot Data Cartridge Exchange System For Use With A Data Storage System                                |
| 82041695     | Granted | 961439        | 12/10/1998  | 3/8/2006   | 98123605.2         | GB | Network Management Event Storage And Manipulation Using Relational Database Technology In A Data Warehouse |
| 82043129     | Granted | 1037145       | 11/30/1999  | 8/10/2005  | 99123777.7         | GB | Hybrid Just-in-time Compiler That Consumes Minimal Resource                                                |
| 82044560     | Granted | 1031977       | 2/24/2000   | 10/2/2002  | 301478.4           | GB | Data Cartridge Exchange Apparatus                                                                          |
| 82046546     | Granted | 1049031       | 11/18/1999  | 9/3/2008   | 99122965.9         | GB | Web Server With An Adaptive Load Control (amended 10/2000)                                                 |
| 82047875     | Granted | 2085209       | 7/23/1999   | 1/5/2000   | 2085209            | GB | Bezel For Rack Mounted Device                                                                              |
| 82049249     | Granted | 2362024       | 1/29/2001   | 1/21/2004  | 102237.5           | GB | Media Handling Device Having Replaceable Modules                                                           |
| 82049858     | Granted | 2351184       | 3/7/2000    | 6/18/2003  | 5491.6             | GB | Cover For Standalone Chassis                                                                               |
| 82050917     | Granted | 2356762       | 8/2/2000    | 10/1/2003  | 18984.5            | GB | Grouping Targets Of Management Policies                                                                    |
| 82060088     | Granted | 1320217       | 12/14/2001  | 10/13/2004 | 1129865            | GB | Method, System And Computer Program For Monitoring Objects In An It Network                                |
| 82061654     | Granted | 2357229       | 12/8/1999   | 3/17/2004  | 9929034.8          | GB | Security Protocol                                                                                          |
| 82061924     | Granted | 2360173       | 3/7/2000    | 4/7/2004   | 5315.7             | GB | Image Transfer Over Mobile Radio Network                                                                   |
| 82062344     | Granted | 2362970       | 5/31/2000   | 12/29/2004 | 13041.9            | GB | Improvements Relating To Information Storage                                                               |

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| 82062536     | Granted | 1281269       | 5/8/2001    | 5/4/2005   | 1925726            | GB | Charging For VAS Resource Usage In A Communications Infrastructure                                                          |
| 82062650     | Granted | 2372187       | 10/29/2001  | 10/20/2004 | 125873             | GB | Improvements Relating To Data Readers                                                                                       |
| 82062770     | Granted | 2368225       | 10/17/2000  | 12/10/2003 | 25458.1            | GB | Inviting Assistant Entity Into A Network Communication Session                                                              |
| 82062788     | Granted | 2368246       | 10/17/2000  | 9/1/2004   | 25462.3            | GB | Alert System For Information Page Server                                                                                    |
| 82062839     | Granted | 1174728       | 7/10/2001   | 9/24/2008  | 1305936.5          | GB | Location Data Diffusion And Location Discovery                                                                              |
| 82063526     | Granted | 2372594       | 2/23/2001   | 10/6/2004  | 104670.5           | GB | Assessor For Monitoring Trusted Status In An Environment                                                                    |
| 82063541     | Granted | 2376764       | 6/19/2001   | 12/29/2004 | 114891.5           | GB | A Platform Supporting Multiple Trusted Application Environments                                                             |
| 82063583     | Granted | 2369466       | 7/12/2001   | 11/17/2004 | 116999.4           | GB | Content Billing Engine For Aggregation Portals                                                                              |
| 82063607     | Granted | 2377043       | 6/27/2001   | 1/5/2005   | 115641.3           | GB | Anonymous Storage                                                                                                           |
| 82063652     | Granted | 1309916       | 8/17/2001   | 10/18/2006 | 1958228.7          | GB | A Computer System Operable To Revert To A Trusted State                                                                     |
| 82064018     | Granted | 2373348       | 3/7/2001    | 1/12/2005  | 105691             | GB | Computer System                                                                                                             |
| 82064213     | Granted | 1294157       | 9/10/2002   | 11/23/2005 | 2256245.8          | GB | Method And Apparatus For Identifying A Voice Caller                                                                         |
| 82064606     | Granted | 1280317       | 7/26/2002   | 9/13/2006  | 2255248.6          | GB | Multi-domain Authorisation And Authentication                                                                               |
| 82065767     | Granted | 2382009       | 10/8/2002   | 4/14/2004  | 223257.7           | GB | Traffic Manipulation On A Computer Network - II                                                                             |
| 82066268     | Granted | 2381173       | 10/4/2002   | 6/30/2004  | 222978.9           | GB | A Method, Using Identity Based Encryption, To Permit A Sender Of A Message To Place Constraints On Who Can Read The Message |
| 82067723     | Granted | 2335303       | 3/12/1999   | 1/2/2002   | 9905672.3          | GB | Data Storage System                                                                                                         |
| 82067765     | Granted | 957484        | 5/12/1998   | 10/5/2005  | 98303691.4         | GB | Read After Write                                                                                                            |
| 82067954     | Granted | 2368754       | 10/31/2000  | 5/19/2004  | 26624.7            | GB | Error Detection And Correction                                                                                              |
| 82068074     | Granted | 1008048       | 8/28/1998   | 10/31/2001 | 98940428           | GB | Data Backup And Recovery System                                                                                             |
| 82068335     | Granted | 2070020       | 10/23/1997  | 3/9/1998   | 2070020            | GB | Front Panel                                                                                                                 |
| 82068536     | Granted | 938053        | 2/19/1999   | 8/20/2003  | 99301223.6         | GB | Dynamic Index                                                                                                               |
| 82068644     | Granted | 1101164       | 8/6/1999    | 1/2/2003   | 99940291           | GB | System For Improved Data Backup And Recovery                                                                                |
| 82069094     | Granted | 2346229       | 1/29/1999   | 4/30/2003  | 9901857.4          | GB | Web Usage                                                                                                                   |
| 82069403     | Granted | 1054530       | 4/19/2000   | 1/11/2006  | 303325.5           | GB | Loop Prevention In Networks                                                                                                 |
| 82070951     | Granted | 1309220       | 10/31/2001  | 8/5/2009   | 1410142.2          | GB | Data Processing System And Method                                                                                           |
| 82071335     | Granted | 1330099       | 1/21/2002   | 7/27/2005  | 2354011.5          | GB | Method Of Brokering Network Services                                                                                        |
| 82077323     | Granted | 901672        | 4/24/1997   | 11/12/2003 | 97922458.1         | GB | System, Method And Article Of Manufacture For Network Electronic Authorization Utilizing An Authorization Instrument        |
| 82079960     | Granted | 2393330       | 8/28/2003   | 11/16/2005 | 320183.7           | GB | Circuit Cooling Apparatus                                                                                                   |
| 82082573     | Granted | 1463049       | 10/17/2003  | 9/30/2009  | 3023651.7          | GB | Media Storage System And Method For Identifying A Storage Location Therein                                                  |
| 82083209     | Granted | 2393327       | 8/27/2003   | 1/25/2006  | 320061.5           | GB | Heat Sink With Heat Pipe And Base Fins                                                                                      |
| 82084814     | Granted | 2384137       | 12/31/2002  | 4/6/2005   | 230345.1           | GB | Hardware Pay-Per-Use                                                                                                        |
| 82085000     | Granted | 2394122       | 9/23/2003   | 4/26/2006  | 322293.2           | GB | Cooling Fan Control Based On Cabinet Intrusion                                                                              |

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| 82088006     | Granted | 2402813       | 5/19/2004   | 6/28/2006  | 411143.1           | GB | Connector Having A Pypas Capacitor And Method For Reducing The Impedance And Length Of A Return-signal                     |
| 82088696     | Granted | 2390747       | 6/30/2003   | 11/9/2005  | 315306.1           | GB | Ejector Latch Connector                                                                                                    |
| 82091303     | Granted | 2393331       | 9/1/2003    | 9/21/2005  | 320443.5           | GB | Composite Construction Baffle For Modular Electronic Systems                                                               |
| 82093049     | Granted | 2393538       | 7/22/2003   | 8/31/2005  | 317125.3           | GB | System And Method For Using An Operating System Defined Field In ACPI Support Multiple Operating Systems                   |
| 82094387     | Granted | 2398712       | 1/20/2004   | 6/28/2006  | 401123.5           | GB | Privacy Management Of Personal Data                                                                                        |
| 82094633     | Granted | 2425680       | 4/27/2005   | 5/20/2009  | 508477.7           | GB | Network Analysis                                                                                                           |
| 82095947     | Granted | 1432209       | 11/3/2003   | 5/6/2009   | 3256934.5          | GB | Method And Architecture To Provide Client Session Failover                                                                 |
| 82096241     | Granted | 2398897       | 2/6/2004    | 11/16/2005 | 402656.3           | GB | Improved Diagnostic Exerciser And Methods Therefor                                                                         |
| 82096487     | Granted | 2404792       | 7/29/2004   | 12/27/2006 | 416956.1           | GB | Heat Sink Fan Management Based On Performance Requirements                                                                 |
| 82097069     | Granted | 1757111       | 6/13/2005   | 4/28/2010  | 5754562.6          | GB | Method And System For Establishing Communications                                                                          |
| 82098254     | Granted | 2398200       | 1/12/2004   | 12/14/2005 | 400593             | GB | Method And Apparatus For Processing Network Topology Data                                                                  |
| 82098311     | Granted | 239474        | 2/17/2004   | 12/14/2005 | 403523.4           | GB | Method And System For Managing A Device Within A Private Network Using A Management Device External To The Private Network |
| 82098428     | Granted | 2455452       | 8/28/2007   | 11/3/2010  | 903491.9           | GB | Computer System Indicator Panel With Exposed Indicator Edge                                                                |
| 82098434     | Granted | 2469953       | 8/28/2007   | 5/4/2011   | 1012251.3          | GB | Computer System Indicator Panel With Exposed Indicator Edge                                                                |
| 82099607     | Granted | 1763260       | 9/12/2005   | 6/17/2009  | 5300740.7          | GB | Context-based Event Processing                                                                                             |
| 82100255     | Granted | 2406673       | 9/27/2004   | 1/17/2007  | 421462.3           | GB | A Rack Equipment Management Information Coordination System And Method                                                     |
| 82100567     | Granted | 2406935       | 10/1/2004   | 7/5/2006   | 421932.5           | GB | Central Processing Unit With Multiple Clock Zones And Operating Method                                                     |
| 82101551     | Granted | 1465440       | 4/3/2003    | 7/9/2008   | 3290837.8          | GB | Methods And Apparatus For Controlling Processing Entities, Such As Distributed Signalling Gateways                         |
| 82101605     | Granted | 2399434       | 3/10/2004   | 3/22/2006  | 405428.4           | GB | An Integrated Circuit                                                                                                      |
| 82101734     | Granted | 2398669       | 2/10/2004   | 3/26/2008  | 402873.4           | GB | A Method For Improving Tape Drive Streaming Performance By Monitoring And Controlling Data Compression                     |
| 82101977     | Granted | 2411313       | 2/21/2004   | 7/26/2006  | 403931.9           | GB | NETWORK CONNECTION CONTROL                                                                                                 |
| 82102127     | Granted | 2404761       | 8/5/2004    | 10/11/2006 | 417456.7           | GB | Multiprocessor System With Interactive Synchronization Of Local Clocks                                                     |
| 82103564     | Granted | 2410846       | 2/2/2005    | 11/29/2006 | 502157.1           | GB | Redundant Input Power System                                                                                               |

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| 82103867     | Granted | 2407892       | 11/5/2004   | 9/27/2006  | 424561.9           | GB | System And Method For Testing A Component In A Computer System Using Frequency Margining                                                                            |
| 82105847     | Granted | 1471680       | 4/21/2004   | 6/21/2006  | 4252330.8          | GB | Cryptographic Method And Apparatus                                                                                                                                  |
| 82106051     | Granted | 2397909       | 1/2/2004    | 12/21/2005 | 400020.4           | GB | Methods And Apparatus For Managing Temporary Capacity In A Computer System                                                                                          |
| 82116092     | Granted | 723238        | 1/23/1996   | 9/19/2001  | 96300429.6         | GB | RELATIONAL DATABASE SYSTEM AND METHOD WITH HIGH-LEVEL DATA AVAILABILITY DURING TABLE DATA RESTRICTING                                                               |
| 82126889     | Granted | 768599        | 10/4/1996   | 12/17/2003 | 96307279.8         | GB | ON-LINE DISK ARRAY RECONFIGURATION                                                                                                                                  |
| 82127456     | Granted | 779579        | 12/12/1996  | 5/15/2002  | 96309071.7         | GB | BUS ERROR HANDLER FOR PER#& SERR# ON DUAL PORT BUS SYSTEM                                                                                                           |
| 82128260     | Granted | 811937        | 6/4/1997    | 1/19/2005  | 97303808.6         | GB | AUTOMATICALLY PREFETCHING DATA IN A COMP- NETWORK SWITCH WITH A MULTIPLE BUS STRUCTURE AND A BRIDGE INTERFACE FOR TRANSFERRING NETWORK DATA BETWEEN DIFFERENT BUSES |
| 82128836     | Granted | 854613        | 12/30/1997  | 11/17/2004 | 97310663.6         | GB | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                                                                      |
| 82165238     | Granted | 782301        | 12/23/1996  | 3/26/2003  | 96120819.6         | GB | Method Of, And Apparatus For, Monitoring Traffic Emanating From A Source In A Network                                                                               |
| 82169219     | Granted | 2416954       | 7/30/2004   | 10/31/2007 | 417139.3           | GB | Method And Apparatus For Storing Data On Magnetic Tape                                                                                                              |
| 82170164     | Granted | 2408379       | 11/18/2004  | 2/20/2008  | 425469.4           | GB | A Method And System For Connecting Calls                                                                                                                            |
| 82171235     | Granted | 2408412       | 11/8/2004   | 7/26/2006  | 424630.2           | GB | Method And System For Responding To Network Intrusions                                                                                                              |
| 82171667     | Granted | 2406746       | 9/28/2004   | 6/28/2006  | 421546.3           | GB | Fault-tolerant Multi-core Microprocessing                                                                                                                           |
| 82172291     | Granted | 2407414       | 10/13/2004  | 10/4/2006  | 422724.5           | GB | Airflow Distribution Control System For Usage In A Raised-floor Data Center                                                                                         |
| 82174652     | Granted | 2410546       | 1/13/2005   | 7/23/2008  | 500732.3           | GB | Liquid Loop With Multiple Pump Assembly                                                                                                                             |
| 82174772     | Granted | 2413709       | 3/29/2005   | 10/31/2007 | 506339.1           | GB | Method And System For Determining A Source Of A Virtual Circuit Fault                                                                                               |
| 82177352     | Granted | 2403374       | 6/10/2004   | 4/12/2006  | 413006.8           | GB | Cryptographic Method And Apparatus                                                                                                                                  |
| 82177517     | Granted | 2401012       | 4/22/2004   | 7/6/2005   | 408892.8           | GB | Key-configured Topology With Connection Management                                                                                                                  |
| 82177523     | Granted | 2401014       | 4/22/2004   | 9/14/2005  | 408903.3           | GB | Node Management In High-availability Cluster                                                                                                                        |
| 82178213     | Granted | 2413045       | 3/31/2005   | 11/29/2006 | 506547.9           | GB | Airflow Detection System Having An Airflow Indicating Device                                                                                                        |
| 82178531     | Granted | 2410406       | 1/19/2005   | 3/7/2007   | 501119.2           | GB | Memory Controller Connection To RAM Using Buffer Interface                                                                                                          |
| 82179035     | Granted | 1716733       | 2/17/2005   | 8/18/2010  | 5723213.4          | GB | Enablement Of Route Table Entries                                                                                                                                   |
| 82180205     | Granted | 2409917       | 1/11/2005   | 11/22/2006 | 500498.1           | GB | Non-platform-specific Unique Identifier Generation                                                                                                                  |
| 82180952     | Granted | 2409949       | 1/11/2005   | 7/19/2006  | 500499.9           | GB | Tape Guide System                                                                                                                                                   |
| 82182017     | Granted | 1548580       | 11/8/2004   | 6/13/2007  | 4256917.8          | GB | Method And Apparatus For Selecting A Primary Resource In A Redundant Subsystem                                                                                      |
| 82185143     | Granted | 2413687       | 5/3/2005    | 1/10/2007  | 508966.9           | GB |                                                                                                                                                                     |
| 82185965     | Granted | 2431755       | 10/30/2006  | 5/11/2011  | 621589.1           | GB |                                                                                                                                                                     |

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| 82186208     | Granted | 1757065       | 5/13/2005   | 12/5/2007  | 5752784.8          | GB | Improvements In Message-based Communications                                                                                                             |
| 82187774     | Granted | 1784998       | 8/31/2005   | 2/18/2009  | 5784661            | GB | COMMUNICATIONS INFRASTRUCTURE FOR CONTENT DELIVERY USING EDGE SERVERS                                                                                    |
| 82189085     | Granted | 1775969       | 10/17/2005  | 5/5/2010   | 5300830.6          | GB | Communication System And Method                                                                                                                          |
| 82189388     | Granted | 2423573       | 1/13/2006   | 6/30/2010  | 600716.5           | GB | Thermal And Power Management Apparatus                                                                                                                   |
| 82190213     | Granted | 2416885       | 7/12/2005   | 3/4/2009   | 514306             | GB | Run-time Updating Of Prediction Hint Instructions                                                                                                        |
| 82190396     | Granted | 2412228       | 3/18/2005   | 2/22/2006  | 505530.6           | GB | Application Sends A Key To The Drive On WORM Medium Initialisation That Enables Later Medium Re-setting                                                  |
| 82190450     | Granted | 2419026       | 10/8/2004   | 5/6/2009   | 422339.2           | GB | Embed A Tape Drive's Serial Number In The Subcode Area Of The Data Blocks Written By The Tape Drive                                                      |
| 82190456     | Granted | 2418770       | 10/2/2004   | 4/22/2009  | 421950.7           | GB | Dual Tape Log To Prevent Corruption When Problems Occur During Log Update                                                                                |
| 82190636     | Granted | 2422476       | 1/21/2005   | 5/23/2007  | 501243             | GB | Enhanced Tape Log To Include Drive Identifier And Tape Alert Flags To Create A Recent History Over The Last 'X' Tape Load                                |
| 82192007     | Granted | 2425378       | 4/11/2006   | 7/15/2009  | 607170.8           | GB | Redundant I/O Interface Management                                                                                                                       |
| 82192016     | Granted | 2425690       | 4/11/2006   | 11/4/2009  | 607238.3           | GB | Remote Detection Employing RFID                                                                                                                          |
| 82194590     | Granted | 2415579       | 6/23/2004   | 12/20/2006 | 414062             | GB | Cryptographic Method And Apparatus                                                                                                                       |
| 82194821     | Granted | 2418274       | 8/26/2005   | 7/16/2008  | 517470.1           | GB | System And Method For Allocating Computing Resources For A Grid Virtual System                                                                           |
| 82196438     | Granted | 2425380       | 4/12/2006   | 9/2/2009   | 607291.2           | GB | Computing With Both Lock-step And Free Step Processor Modes                                                                                              |
| 82197149     | Granted | 2419729       | 10/28/2004  | 3/28/2007  | 424025.5           | GB | Multiple Cartridge Loading Mechanism For DAT160                                                                                                          |
| 82197401     | Granted | 2421101       | 11/11/2005  | 11/12/2008 | 523073.5           | GB | Distributed Lock                                                                                                                                         |
| 82198436     | Granted | 1812990       | 11/18/2005  | 4/15/2009  | 5851812.7          | GB | Composite Material With Controllable Resonant Cells                                                                                                      |
| 82199324     | Granted | 2427334       | 6/1/2006    | 10/6/2010  | 610862.5           | GB | Method And Apparatus For Automatic And Secure Distribution Of A Symmetric Key Security Credential In A Utility Computing Environment                     |
| 82199513     | Granted | 2429805       | 8/14/2006   | 12/22/2010 | 616145.9           | GB | Memory Correction System And Method                                                                                                                      |
| 82199942     | Granted | 1681880       | 12/19/2005  | 11/18/2009 | 5027786.2          | GB | Data Retrieval From Computing Systems                                                                                                                    |
| 82200134     | Granted | 1777970       | 10/21/2005  | 7/28/2010  | 5300845.4          | GB | Communication System And Method                                                                                                                          |
| 82201256     | Granted | 2431843       | 10/24/2006  | 7/6/2011   | 621169.2           | GB | System, Method And Utility To Format Images Retrieved From A Device                                                                                      |
| 82202678     | Granted | 2431847       | 10/24/2006  | 6/29/2011  | 621177.5           | GB | DEVICE STORING VECTOR IMAGE WITH HANDLES IDENTIFYING PORTIONS OF THE DEVICE, AND METHODS AND COMPUTER PROGRAMS TO AID IN MAPPING OR CORRELATING PORTIONS |
| 82202867     | Granted | 2418326       | 9/17/2004   | 4/11/2007  | 420664.5           | GB | Network Virtualization                                                                                                                                   |
| 82203677     | Granted | 2422217       | 1/14/2005   | 12/23/2009 | 500715.8           | GB | Use Of Common User Repository Identity In A Service Delivery Platform                                                                                    |

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| 82204244     | Granted | 2422216       | 1/14/2005   | 12/9/2009  | 500714.1           | GB | A Common Service Repository With Multiple Service Bins                                                                                 |
| 82204253     | Granted | 2422219       | 1/14/2005   | 1/6/2010   | 500717.4           | GB | A Common Service Repository For Use With A State Based Execution Environment                                                           |
| 82204502     | Granted | 2421602       | 11/21/2005  | 7/1/2009   | 523670.8           | GB | System And Method For Replacing An Inoperable Master Workload Management Process                                                       |
| 82204511     | Granted | 2423607       | 2/28/2006   | 7/29/2009  | 603921.8           | GB | Computer System And Method For Transferring Executables Between Partitions                                                             |
| 82206008     | Granted | 2424974       | 4/3/2006    | 7/8/2009   | 606614.6           | GB | Distributed-state-information-based Distributed Computing Systems And Methods And Protocols For Managing Distributed State Information |
| 82206308     | Granted | 2439868       | 3/9/2006    | 10/6/2010  | 719791.6           | GB | Embedded Web-based Management Method                                                                                                   |
| 82206320     | Granted | 2425645       | 4/11/2006   | 2/2/2011   | 607173.2           | GB | Drive Bezels For Computer Storage Systems                                                                                              |
| 82207682     | Granted | 2427317       | 6/16/2006   | 5/19/2010  | 611900.2           | GB | Quantum Key Distribution Apparatus & Method                                                                                            |
| 82208558     | Granted | 2442308       | 9/12/2007   | 7/20/2011  | 717794.2           | GB | Sequencer                                                                                                                              |
| 82208690     | Granted | 2438546       | 3/1/2005    | 6/17/2009  | 716388.4           | GB | Packet Forwarding System And Packet Forwarding Device                                                                                  |
| 82208858     | Granted | 2432088       | 11/1/2006   | 6/9/2010   | 621776.4           | GB | Method For Controlling Data Transfers Through A Computer System                                                                        |
| 82209074     | Granted | 1724971       | 3/10/2005   | 7/9/2008   | 5720467.9          | GB | Server System, Server Device And Method Therefor                                                                                       |
| 82209176     | Granted | 2446241       | 10/5/2007   | 3/9/2011   | 719537.3           | GB | Memory Control Systems With Directory Caches And Methods For Operation Thereof                                                         |
| 82209239     | Granted | 2426841       | 6/4/2005    | 7/14/2010  | 511438.4           | GB | Memory Controller                                                                                                                      |
| 82209872     | Granted | 2441435       | 8/29/2007   | 3/16/2011  | 716775.2           | GB | Directory Caches, And Methods For Operation Thereof                                                                                    |
| 82210691     | Granted | 2431148       | 10/31/2005  | 12/22/2010 | 522221.1           | GB | Data Back-up And Recovery                                                                                                              |
| 82211429     | Granted | 2428863       | 7/29/2005   | 8/8/2007   | 515730             | GB | Cartridges For Data Transfer Apparatus                                                                                                 |
| 82212488     | Granted | 2430778       | 9/19/2006   | 10/27/2010 | 618421.2           | GB | System And Method For Throttling Memory Accesses                                                                                       |
| 82212608     | Granted | 2431321       | 10/12/2005  | 6/9/2010   | 520712.1           | GB | PROPAGATION OF MALICIOUS CODE THROUGH AN INFORMATION TECHNOLOGY NETWORK                                                                |
| 82212629     | Granted | 2437624       | 4/20/2007   | 8/24/2011  | 707685.4           | GB | Array-based Memory Abstraction                                                                                                         |
| 82212632     | Granted | 2431316       | 10/12/2005  | 5/21/2008  | 520711.3           | GB | PROPAGATION OF MALICIOUS CODE THROUGH AN INFORMATION TECHNOLOGY NETWORK                                                                |
| 82212866     | Granted | 2011007       | 4/25/2007   | 3/24/2010  | 7756009.2          | GB | Method And System For Scalable, Distributed, Differential Electronic-data Backup And Archiving                                         |
| 82214114     | Granted | 2429308       | 7/29/2005   | 8/1/2007   | 515734.2           | GB | Hardware Encryption Using An Encryption Configuration Tape To Enhance Security In A Tape Drive Backup Solution                         |
| 82214120     | Granted | 2434896       | 7/29/2005   | 11/21/2007 | 708191.2           | GB | Data Transfer Device                                                                                                                   |
| 82214936     | Granted | 2428533       | 6/24/2005   | 8/22/2007  | 512832.7           | GB | Determining Data Flows In A Network                                                                                                    |
| 82215371     | Granted | 2431741       | 10/27/2005  | 11/3/2010  | 521898.7           | GB | A METHOD OF DIGITALLY SIGNING DATA AND A DATA REPOSITORY STORING DIGITALLY SIGNED DATA                                                 |
| 82216061     | Granted | 2449037       | 1/17/2007   | 4/13/2011  | 815639             | GB | Multilayer Distributed Processing System                                                                                               |

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| 82216124     | Granted | 1943/57       | 1/30/2007   | 5/13/2009  | 7762845.1          | GB | Methods And Systems For Avoiding Transmission-channel Disruptions                                     |
| 82216181     | Granted | 2430850       | 9/20/2006   | 12/1/2010  | 618481.6           | GB | METHOD AND SYSTEM USING ONE-TIME PAD DATA TO EVIDENCE THE POSSESSION OF A PARTICULAR ATTRIBUTE        |
| 82216496     | Granted | 2450869       | 7/9/2007    | 4/25/2012  | 713200.4           | GB | ESTABLISHING A TRUST RELATIONSHIP BETWEEN COMPUTING ENTITIES                                          |
| 82216553     | Granted | 2431770       | 10/31/2005  | 9/21/2011  | 522227.8           | GB | Emulated Tape-based Storage Media                                                                     |
| 82216997     | Granted | 2434888       | 2/2/2006    | 7/13/2011  | 602020             | GB | Restoring A Client Device                                                                             |
| 82217477     | Granted | 2431252       | 10/11/2005  | 6/9/2010   | 520604             | GB | Data Transfer Device                                                                                  |
| 82217810     | Granted | 2436209       | 3/1/2007    | 3/30/2011  | 704005.8           | GB | Methods And Systems For Hierarchical Management Of Distributed Data                                   |
| 82218239     | Granted | 2437105       | 3/1/2007    | 6/15/2011  | 704004.1           | GB | Consistency Methods And Systems                                                                       |
| 82218848     | Granted | 1977427       | 1/26/2007   | 3/3/2010   | 7709841.6          | GB | Mixed-scale Electronic Interface                                                                      |
| 82219358     | Granted | 2427337       | 6/19/2006   | 1/20/2010  | 611946.5           | GB | Quantum Key Distribution Method And Apparatus                                                         |
| 82219364     | Granted | 2430848       | 10/31/2005  | 6/2/2010   | 522092.6           | GB | Device With Multiple One-time Pads And Method Of Managing Such A Device                               |
| 82219370     | Granted | 2430845       | 10/28/2005  | 3/24/2010  | 521933.2           | GB | Method Of Provisioning Devices With One-time Pad Data And A Device For Use In Implementing The Method |
| 82219376     | Granted | 2430775       | 10/31/2005  | 6/23/2010  | 522141.1           | GB | Method Of Managing One-time Pad Data And Device Implementing This Method                              |
| 82219670     | Granted | 2446183       | 1/31/2007   | 7/20/2011  | 701811.2           | GB | Method And Apparatus For Controlling Motion Of Storage Media                                          |
| 82219814     | Granted | 2435333       | 2/1/2006    | 7/14/2010  | 602012.7           | GB | Data Transfer Device                                                                                  |
| 82219850     | Granted | 1811724       | 12/29/2006  | 8/12/2009  | 6027116            | GB | Determining Data Link (L2) Network Paths                                                              |
| 82222103     | Granted | 2440561       | 7/28/2006   | 3/30/2011  | 615018.9           | GB | Data Storage System                                                                                   |
| 82225226     | Granted | 2443446       | 10/30/2006  | 11/30/2011 | 621469.6           | GB | A METHOD OF IDENTIFYING AN EXTRACTABLE PORTION OF A SOURCE MACHINE-READABLE DOCUMENT                  |
| 82228031     | Granted | 2446172       | 1/30/2007   | 1/21/2009  | 701685             | GB | Control Of Data Transfer                                                                              |
| 82229981     | Granted | 2462961       | 5/21/2008   | 3/7/2012   | 921280.4           | GB | END-TO-END FLOW CONTROL IN A NETWORK BACKGROUND                                                       |
| 82230479     | Granted | 2466579       | 10/25/2007  | 12/26/2012 | 1000243.4          | GB | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                               |
| 82230899     | Granted | 1986397       | 4/11/2008   | 8/4/2010   | 8103499.3          | GB | REDUCING A NUMBER OF REGISTRATION TERMINATION MESSAGES IN A NETWORK FOR CELLULAR DEVICES              |
| 82233029     | Granted | 2466751       | 9/19/2008   | 9/26/2012  | 1007154.6          | GB | Hardware Device Interface (as Amended)                                                                |
| 82233224     | Granted | 1279100       | 4/3/2001    | 6/16/2004  | 1926566.9          | GB | USE OF A SINGLE THREAT TO SUPPORT MULTIPLE NETWORK CONNECTIONS FOR SERVER LOAD TESTING                |
| 82233293     | Granted | 2466581       | 10/25/2007  | 1/9/2013   | 1000248.3          | GB | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                               |

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| 822535645    | Granted   | 2472520       | 4/25/2008   | 11/21/2012 | 1015473            | GB | DATA PROCESSING APPARATUS AND METHOD OF DEDUPLICATING DATA FOR DATA BACKUP  |
| 82238654     | Granted   | 2467721       | 1/28/2008   | 6/12/2013  | 1010537.7          | GB | DEPLOYMENT OF BOOT IMAGES IN DISKLESS SERVERS                               |
| 82242722     | Granted   | 2458154       | 3/7/2008    | 5/29/2012  | 804253.3           | GB | Routing Across A Virtual Network                                            |
| 82243037     | Granted   | 2460252       | 5/21/2008   | 9/26/2012  | 809227.2           | GB | OKD System Alignment                                                        |
| 82243406     | Granted   | 2459433       | 3/7/2008    | 6/6/2012   | 804263.2           | GB | Distributed Network Connection Policy Management                            |
| 82243763     | Granted   | GB2460412     | 5/28/2008   | 9/19/2012  | 809589.5           | GB | Information Sharing                                                         |
| 82244522     | Granted   | 2455496       | 10/31/2007  | 5/30/2012  | 721310.1           | GB | Error Detection Method And Apparatus                                        |
| 82245632     | Granted   | 2473759       | 4/30/2008   | 3/27/2013  | 1018296.2          | GB | Intentionally Skewed Optical Cloack Signal Distribution                     |
| 82247402     | Granted   | 2446454       | 2/7/2007    | 9/21/2011  | 702424.3           | GB | Cool Design Data Center                                                     |
| 82247897     | Granted   | 2464966       | 10/31/2008  | 8/29/2012  | 819995.2           | GB | Policy Enforcement In Trusted Platforms                                     |
| 82249265     | Granted   | 2466071       | 12/15/2008  | 11/13/2013 | 822726.6           | GB | Associating A Signing Key With A Software Component Of A Computing Platform |
| 82250189     | Published |               | 5/8/2009    |            | 907936.9           | GB | Quantum Repeater And System And Method For Creating Extended Entanglements  |
| 82250192     | Granted   | 2470081       | 6/30/2009   | 42214      | 911271.5           | GB | Quantum Repeater And System And Method For Creating Extended Entanglements  |
| 82250693     | Granted   | 2467975       | 2/24/2009   | 9/10/2014  | 903104.8           | GB | Authentication Method And Apparatus Using One Time Pads                     |
| 82252391     | Granted   | 890155        | 2/24/1997   | 6/30/2004  | 97906748.5         | GB | Automated System for Selecting an Initial Computer Reservation System       |
| 82252874     | Granted   | 935786        | 10/29/1997  | 5/11/2005  | 97946866.7         | GB | Fail-Safe Event Driven Transaction Processing System and Method             |
| 82253651     | Granted   | 1409191       | 7/19/2002   | 8/23/2006  | 2752474.3          | GB | Method and System for Weld Process Monitoring                               |
| 82254587     | Granted   | 1545936       | 9/30/2003   | 8/4/2010   | 3799309.4          | GB | DRIVE-BY-WIRELESS VEHICLE CONTROL                                           |
| 82255010     | Granted   | 1573964       | 12/17/2003  | 6/21/2006  | 3814189.1          | GB | METHOD OF GUARANTEED DELIVERY OF SNMP TRAPS ACROSS A WIDE AREA NETWORK      |
| 82255871     | Granted   | 1700286       | 10/29/2004  | 5/2/2007   | 4796875.5          | GB | BOUNDARY DETECTION ALGORITHM FOR EMBEDDED DEVICES                           |
| 82260365     | Granted   | 2474300       | 10/12/2009  | 5/30/2012  | 917801.3           | GB | METHOD AND SYSTEM FOR PRINTING                                              |
| 82265756     | Granted   | 2310978       | 12/19/1995  | 2/2/2000   | 9710461.6          | GB | RADIO BASED COLLISION DETECTION FOR WIRELESS COMMUNICATION SYSTEM           |
| 82265864     | Granted   | 2344499       | 5/9/1996    | 10/18/2000 | 9930727.4          | GB | Bridge Router for High Performance Scalable Networking                      |
| 82265867     | Granted   | 2344498       | 5/9/1996    | 10/18/2000 | 9930726.6          | GB | Bridge Router for High Performance Scalable Networking                      |
| 82265870     | Granted   | 2316443       | 5/9/1996    | 5/31/2000  | 9724996.5          | GB | Bridge Router for High Performance Scalable Networking                      |
| 82265936     | Granted   | 2317543       | 7/12/1996   | 4/26/2000  | 9800046.6          | GB | Architecture For Managing Traffic In A Virtual LAN Environment              |
| 82266314     | Granted   | 873625        | 7/24/1996   | 9/14/2005  | 96925499.4         | GB | METHOD AND APPARATUS FOR ASYNCHRONOUS PPP SYNCHRONOUS PPP CONVERSION        |

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| 82266566     | Granted     | 2330285       | 7/15/1997   | 5/30/2001  | 9900960.7          | GB | Virtual Network Architecture For Connectionless LAN Backbone                                                                                    |
| 82267052     | Granted     | 2340004       | 5/1/1998    | 12/12/2001 | 9926176            | GB | Method and Apparatus For Multipoint Trunking                                                                                                    |
| 82267325     | Granted     | 2054390       | 2/23/1996   | 6/18/1996  | 2054390            | GB | Enclosure For Electronic Circuitry                                                                                                              |
| 82267691     | Granted     | 1040611       | 12/11/1998  | 6/5/2002   | 98967000.5         | GB | A Forward Error Correction System For Packet Based Real Time Media                                                                              |
| 82268360     | Granted     | 2352148       | 4/7/1999    | 7/16/2003  | 24195              | GB | Point-To-Point Protocol With A Signaling Channel                                                                                                |
| 82268807     | Granted     | 2336079       | 1/25/1999   | 11/27/2002 | 9901376.5          | GB | Scalable Logical Lan                                                                                                                            |
| 82271183     | Granted     | 1060593       | 11/30/1999  | 7/1/2009   | 99965063.3         | GB | Telecommunication Conferencing System And Method                                                                                                |
| 82273868     | Granted     | 2386524       | 8/29/2002   | 3/17/2004  | 220013.7           | GB | Stackable Networks Units with Resilience Facility                                                                                               |
| 82274357     | Granted     | 2405288       | 11/6/2003   | 2/20/2008  | 325923.1           | GB | System and method for distributed multicast routing                                                                                             |
| 82274414     | Granted     | 2409601       | 4/22/2004   | 3/22/2006  | 408947             | GB | Stackable Routers Employing a Routing Protocol                                                                                                  |
| 82274489     | Granted     | 2418110       | 9/14/2004   | 9/6/2006   | 420428.5           | GB | Method and apparatus for controlling traffic between different entities on a network                                                            |
| 82274606     | Granted     | 2441351       | 9/1/2006    | 12/8/2010  | 617232.4           | GB | Positionally dependent pattern checking in character strings using deterministic finite automata                                                |
| 82274612     | Granted     | 2443240       | 10/27/2006  | 5/6/2009   | 621356.5           | GB | Signature checking using deterministic finite state machines                                                                                    |
| 82274618     | Granted     | 2452420       | 10/27/2006  | 5/6/2009   | 819142.1           | GB | Signature checking using deterministic finite state machines                                                                                    |
| 82276358     | Granted     | 2388760       | 5/16/2003   | 10/6/2004  | 311279.4           | GB | A Method Of Calculating An Estimate Of Reliability Of Bit Information In A OFDM Receiver And A Receiver Operating In Accordance With The Method |
| 82276622     | Granted     | 2393083       | 9/9/2003    | 5/10/2006  | 321028.3           | GB | Authentication And Service Provision                                                                                                            |
| 82276922     | Granted     | 2389479       | 6/7/2002    | 12/28/2005 | 213072.2           | GB | Local Policy Monitoring For Server Farms                                                                                                        |
| 82276991     | Granted     | 1369766       | 6/4/2003    | 1/2/2008   | 3253538.7          | GB | Propagation Of Viruses Through An Information Technology Network                                                                                |
| 82277366     | Granted     | 2401959       | 5/23/2003   | 2/22/2006  | 311874.2           | GB | Data Log For Peer-to-peer Network                                                                                                               |
| 82277798     | Granted     | 1414227       | 10/24/2002  | 8/30/2006  | 2354169.1          | GB | Event Detection For Multiple Voice Channel Communications                                                                                       |
| 82277813     | Granted     | 1379060       | 7/5/2002    | 3/4/2009   | 2354105.5          | GB | Improvements In Or Relating To DTMF Control                                                                                                     |
| 82584178     | To Be Filed |               |             |            |                    | GB | Hierarchical Policy Management                                                                                                                  |
| 82586620     | Granted     | 1777875       | 38646       | 40555      | 5109861.4          | GB | Graphical Arrangement Of IT Network Components                                                                                                  |
| 82663198     | Published   |               | 4/26/2011   |            | 1106932.5          | GB | Digital Signature Method And System                                                                                                             |
| 82721366     | Granted     | 985298        | 5/28/1998   | 40632      | 98923848           | GB | Method And Apparatus For Providing Security In A Star Network Connection Using Public Key Cryptography                                          |
| 82723768     | Granted     | 1303100       | 8/13/2002   | 6/29/2011  | 2255636.9          | GB | Reduced Pin-count System Interface For Gigabit Ethernet Physical Layer Devices                                                                  |
| 82759500     | Granted     | 1700446       | 11/5/2004   | 3/23/2011  | 4800797.5          | GB | PREVENTING IDENTITY THEFT IN ELECTRONIC COMMUNICATIONS                                                                                          |
| 82775203     | Granted     | 1355466       | 4/18/2002   | 11/3/2010  | 2252744.4          | GB | Status Transfer Using Frequency                                                                                                                 |

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| 82810924     | Granted   | 1961009       | 11/1/2006   | 1/4/2012   | 6844255.7          | GB | Crossbar-array Designs And Wire Addressing Methods That Tolerate Misalignment Of Electrical Components With Wire At Wire Overlap Points            |
| 82810953     | Granted   | 1221609       | 1/3/2002    | 8/31/2011  | 2250028.4          | GB | A Method For Sensing Humidity In A Tape Library                                                                                                    |
| 82844226     | Granted   | 2481771       | 4/29/2009   | 8/28/2013  | 1118755.5          | GB | Printed Circuit Board Cooling Assembly                                                                                                             |
| 82866221     | Granted   | 1220092       | 12/19/2001  | 6/15/2011  | 1310645.5          | GB | System And Method For Executing Variable Latency Load Operations In A Data Processor                                                               |
| 82891313     | Granted   | 2484423       | 7/29/2009   | 12/24/2014 | 1122169.4          | GB | INTERFACING CLIMATE CONTROLLERS AND COOLING DEVICES                                                                                                |
| 82900882     | Granted   | 2484428       | 7/31/2009   | 12/10/2014 | 1200039.4          | GB | COMMISSIONING OF SENSORS                                                                                                                           |
| 82901623     | Granted   | 2069879       | 8/1/2007    | 11/30/2011 | 7836443.7          | GB | Cooling Fan Module                                                                                                                                 |
| 82901709     | Published |               | 1/29/2010   |            | 1200851.2          | GB | Managing Electric Energy Distribution To Multiple Loads Using Selective Capping                                                                    |
| 82903959     | Granted   | 1684291       | 6/2/2005    | 41010      | 5104797.5          | GB | Non Unique Fragment Number Identifiers                                                                                                             |
| 82924040     | Granted   | 1839457       | 1/13/2006   | 1/11/2012  | 6704619.3          | GB | IMPROVEMENTS IN OR RELATING TO COMMUNICATION SYSTEMS                                                                                               |
| 82936594     | Published |               | 10/5/2009   |            | 1204945.8          | GB | Adjusting A Transducer Head For Transferring Data                                                                                                  |
| 82938220     | Granted   | 2491733       | 1/26/2010   | 41612      | 1212820.3          | GB | Heat Sink With Multiple Vapor Chambers                                                                                                             |
| 82938269     | Published |               | 2/26/2010   |            | 1202059            | GB | RESTORING STABILITY TO AN UNSTABLE BUS                                                                                                             |
| 82938295     | Granted   | 2487845       | 12/2/2009   | 42046      | 1202868.4          | GB | SIGNAL SENSING DEVICES AND CIRCUIT BOARDS                                                                                                          |
| 82951112     | Granted   | 2212806       | 11/13/2008  | 6/27/2012  | 8851440.1          | GB | Allocation Of Resources For Concurrent Query Execution Via Adaptive Segmentation                                                                   |
| 82991035     | Granted   | 1725065       | 5/11/2006   | 5/23/2012  | 6113818.6          | GB | Controlling Access To Communication Services                                                                                                       |
| 83009784     | Granted   | 1249965       | 3/26/2001   | 5/30/2012  | 1107514            | GB | Method, Computer System, And Computer Program For Monitoring Objects Of An Information Technology Environment                                      |
| 83050468     | Granted   | 836306        | 10/10/1996  | 7/4/2012   | 96410106.7         | GB | System Providing For Multiple Virtual Circuits Between Two Network Entities                                                                        |
| 83053692     | Granted   | 2292082       | 4/14/2008   | 8/1/2012   | 8780524.8          | GB | Fan For Computer Element In The Service Position                                                                                                   |
| 83057029     | Granted   | 1428149       | 9/20/2002   | 11/7/2012  | 2768873.8          | GB | A System And Method For A Multi-node Environment With Shared Storage                                                                               |
| 83087113     | Granted   | 942427        | 2/24/1999   | 6/27/2012  | 99301353.1         | GB | EOD IN MIC                                                                                                                                         |
| 83087139     | Granted   | 1805767       | 10/14/2005  | 12/5/2012  | 5810496.9          | GB | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
| 83092458     | Granted   | 1378093       | 4/9/2001    | 8/8/2012   | 1921066.5          | GB | Authentication And Encryption Method And Apparatus For A Wireless Local Access Network                                                             |
| 83092466     | Published |               | 12/16/2010  |            | 1305000            | GB | A DETACHABLE LID                                                                                                                                   |
| 83115120     | Granted   | 1825640       | 12/6/2004   | 41157      | 4805930.7          | GB | Interconnect System For Supply Chain Management Of Virtual Private Network Services                                                                |

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| 83115131     | Granted   | 2008220       | 3/21/2007   | 9/5/2012   | 7/59004            | GB | Service Management Framework                                                                                                                              |
| 83115420     | Granted   | 2052338       | 10/2/2006   | 6/8/2011   | 6815934.2          | GB | DYNAMIC BULK-TO-BRICK TRANSFORMATION OF DATA                                                                                                              |
| 83119184     | Granted   | 2493660       | 5/20/2010   | 8/20/2014  | 1218784.5          | GB | DATA CENTER COOLING                                                                                                                                       |
| 83137890     | Granted   | 2503965       | 7/12/2010   | 8/13/2014  | 1222208.9          | GB | FLEXIBLE DATA CENTER AND METHODS FOR DEPLOYMENT                                                                                                           |
| 83140718     | Published |               | 10/26/2010  |            | 1300339.7          | GB | BACKUP POWER SUPPLY SYSTEMS AND METHODS                                                                                                                   |
| 83146747     | Granted   | 2352953       | 11/13/2009  | 41276      | 9775127.5          | GB | Data Centre And Apparatus And Method For Data Centre Cooling                                                                                              |
| 83173969     | Granted   | 2076836       | 10/25/2007  | 12/5/2012  | 7868580.7          | GB | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security                                          |
| 83185278     | Granted   | 1078357       | 12/17/1998  | 6/7/2006   | 98964021.4         | GB | Tape Leader Pin Assembly And Method For Making The Same                                                                                                   |
| 83192847     | Granted   | 1875661       | 4/10/2006   | 2/27/2013  | 6743275.7          | GB | IMPROVEMENTS IN OR RELATING TO COMMUNICATIONS                                                                                                             |
| 83194264     | Granted   | 2074771       | 10/1/2007   | 2/27/2013  | 7820748.7          | GB | Management Of Access To Address Data                                                                                                                      |
| 83217123     | Granted   | 1394679       | 8/30/2002   | 5/29/2013  | 2354124.6          | GB | Improvements Relating To Technical Support Systems                                                                                                        |
| 83218689     | Published |               | 10/12/2010  |            | 1305932.4          | GB | RESOURCE MANAGEMENT FOR DATA CENTERS                                                                                                                      |
| 83228578     | Granted   | 2271992       | 4/28/2008   | 41367      | 8743362.9          | GB | Method And System For Generating And Delivering Inter-processor Interrupts In A Multi-core Processor And In Certain Shared-memory Multi-processor Systems |
| 83240733     | Granted   | 913825        | 10/30/1998  | 5/1/2013   | 98308912.9         | GB | Data Encoding Scheme                                                                                                                                      |
| 83240744     | Granted   | 2257880       | 3/25/2008   | 5/8/2013   | 8732796.1          | GB | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                                                                    |
| 83247591     | Granted   | 950302        | 12/8/1997   | 5/8/2013   | 97953075.5         | GB | PUBLIC KEY CRYPTOGRAPHIC APPARATUS AND METHOD                                                                                                             |
| 83505406     | Granted   | 2313830       | 8/13/2008   | 10/2/2013  | 8795330.3          | GB | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                                      |
| 83538248     | Granted   | 1592217       |             | 10/16/2013 |                    | GB | Method And Apparatus For Providing A Specialized Resource Function In A Telephone Network                                                                 |
| 83542275     | Granted   | 2137888       | 39540       | 8/21/2013  | 8742575.7          | GB | Available Bandwidth Estimation                                                                                                                            |
| 83593527     | Granted   | 913824        | 10/30/1998  | 8/14/2013  | 98308901.2         | GB | Generating appendable points in encoded data                                                                                                              |
| 83683797     | Granted   | 2427994       | 10/26/2009  | 9/25/2013  | 9743889.9          | GB | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same                                                                   |
| 83693681     | Published |               | 6/30/2011   |            | 1321670            | GB | A MEMORY MODULE THAT INCLUDES A MEMORY MODULE COPY ENGINE FOR COPYING DATA FROM AN ACTIVE MEMORY DIE TO A SPARE MEMORY DIE                                |
| 83806256     | Granted   | 1622349       | 7/12/2005   | 41683      | 5254353.5          | GB | Teleconference Audio Quality Monitoring                                                                                                                   |
| 83809806     | Granted   | 1676420       | 7/6/2004    | 3/5/2014   | 4766134.3          | GB | Improvements In Or Relating To Fault Tolerant Systems                                                                                                     |
| 83815925     | Granted   | 2011012       | 4/25/2007   | 3/5/2014   | 7756010            | GB | Content-based, Compression-enhancing Routing In Distributed, Differential Electronic-data Storage Systems                                                 |
| 83835725     | Granted   | 2126770       | 1/21/2008   | 3/19/2014  | 8702121.8          | GB | TRUSTED COMPUTING ENTITIES                                                                                                                                |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------|
| 83854737     | Published   |               | 10/27/2011  |            | 1405179.1          | GB | SHIFTABLE MEMORY SUPPORTING IN-MEMORY DATA STRUCTURES                                                               |
| 83873830     | Published   |               | 10/25/2011  |            | 1405911.7          | GB | DRIVE CARRIER SUBSTRATE                                                                                             |
| 83881518     | Granted     | 1920586       | 8/7/2006    | 41738      | 6800866.3          | GB | Screening Of Calls In A Packet-based Network                                                                        |
| 83881942     | Granted     | 2510286       | 10/28/2011  | 8/19/2015  | 1407330.8          | GB | ROW SHIFTING SHIFTABLE MEMORY                                                                                       |
| 83884018     | Granted     | 1625501       | 5/13/2004   | 4/16/2014  | 478554.9           | GB | Read, Write, And Recovery Operations For Replicated Data                                                            |
| 83928534     | Granted     | 2359534       | 12/15/2008  | 5/7/2014   | 8879013.4          | GB | Detecting An Unreliable Link In A Computer System                                                                   |
| 83933051     | Published   |               | 12/23/2011  |            | 1411576            | GB | MANAGING A FACILITY                                                                                                 |
| 83964152     | Granted     | 2514269       | 6/23/2009   | 2/18/2015  | 1411189.2          | GB | Power Distribution To Computer System                                                                               |
| 83985780     | Granted     | 2368268       | 12/23/2008  | 41829      | 8879253.6          | GB | Memristive Device And Methods Of Making And Using The Same                                                          |
| 83996157     | Published   |               | 4/20/2012   |            | 1413613.9          | GB | OVERVOLTAGE PROTECTION SYSTEMS AND METHOD                                                                           |
| 83996458     | Published   |               | 4/30/2012   |            | 1413419.1          | GB | CONTROL SIGNAL BASED ON A COMMAND TAPPED BY A USER                                                                  |
| 83996540     | Published   |               | 4/27/2012   |            | 1413418.3          | GB | Similarity Score Lookup and Representation                                                                          |
| 84016660     | Granted     | 1977572       | 1/23/2007   | 41878      | 7762485.6          | GB | Compute Clusters Employing Photonic Interconnections For Transmitting Optical Signals Between Compute Cluster Nodes |
|              |             |               |             |            |                    |    |                                                                                                                     |
| 84022114     | Granted     | 2260611       | 3/31/2008   | 41871      | 8742453.7          | GB | Automated Power Topology Discovery                                                                                  |
| 84079680     | Published   |               | 7/30/2012   |            | 1418806.4          | GB | GENERATING AND PARTITIONING POLYNOMIALS                                                                             |
| 84080920     | Published   |               | 7/30/2012   |            | 1418808            | GB | SEARCH METHOD                                                                                                       |
| 84081218     | Application |               | 7/31/2012   |            | 1418807.2          | GB | Concept Categorization                                                                                              |
| 84088680     | Application |               | 4/30/2012   |            | 1420197.4          | GB | NOTIFICATION BASED ON AN EVENT IDENTIFIED FROM VIBRATION DATA                                                       |
| 84103209     | Published   |               | 7/31/2012   |            | 1421568.5          | GB | WIRELESS ACCESS POINT CELL ID INSERTION IN FRAME HEADER                                                             |
| 84115807     | Granted     | 2486487       | 10/7/2009   | 41976      | 9850311.3          | GB | Notification Protocol Based Endpoint Caching Of Host Memory                                                         |
| 84116406     | Published   |               | 6/1/2012    |            | 1423391            | GB | SHARING INFORMATION ABOUT RESOURCES IN A COLLABORATIVE ENVIRONMENT                                                  |
| 84122554     | Published   |               | 6/29/2012   |            | 1422943.9          | GB | CAPACITY PLANNING SYSTEM                                                                                            |
| 84140173     | Published   |               | 10/25/2012  |            | 1500939.2          | GB | EVENT CORRELATION                                                                                                   |
| 84140189     | Published   |               | 10/26/2012  |            | 1500944.2          | GB | PROCESSING STREAMING DATA WITH OPEN EXECUTORS                                                                       |
| 84172784     | Granted     | 2350842       | 10/30/2008  | 42060      | 8877865.9          | GB | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                                                |
| 84196128     | Granted     | 2597899       | 10/13/2011  | 42095      | 11306325.9         | GB | Optimizing telephony numbers for Machine 2 Machine Communications using Round Robin Assignment Technique            |
| 84210223     | Published   |               | 10/18/2012  |            | 1505984.3          | GB | COMMUNICATING TUPLES IN A MESSAGE                                                                                   |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------|
| 84212970     | Granted     | 2080048       | 5/4/2009    | 3/4/2015   | 7839603.3          | GB | Photonic-interconnect Systems For Reading Data From Memory Cells And Writing Data To Memory Integrated Circuits        |
| 84290592     | Granted     | 2622487       | 9/28/2011   | 42200      | 11833057           | GB | HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION                                                                 |
| 90031090     | Granted     | 2686883       | 3/29/2011   | 7/1/2015   | 11862142.4         | GB | DUAL-PLANE MEMORY ARRAY                                                                                                |
| 90063373     | Application |               | 9/30/2008   |            | 8824049.4          | GB | Authentication Of Services On A Partition                                                                              |
| 90064664     | Granted     | 2465030       | 8/11/2009   | 10/7/2015  | 9848324.1          | GB | Enclosure Airflow Controller                                                                                           |
| 82088675     | Granted     | 2394084       | 6/27/2003   | 38637      | 315107.3           | GB | SYSTEM AND METHOD FOR FREQUENCY AND PERFORMANCE MODULATION DEPENDENT ON THE NUMBER OF LOADED BLADES IN A BLADED SYSTEM |
| 82891341     | Granted     | 2483420       | 6/23/2009   | 2/18/2015  | 1200041            | GB | Power Distribution To Computer System                                                                                  |
| 83012852     | Granted     | GB2498027     | 10/25/2010  | 8/26/2015  | 1217569.1          | GB | POWER CONVERTER                                                                                                        |
| 83273481     | Published   |               | 12/22/2010  |            | 1310249.6          | GB | Mosfet Switch Gate Driver, Mosfet Switch System And Method                                                             |
| 83995692     | Published   |               | 1/31/2012   |            | 1413608.9          | GB | REDUCING CURRENT HARMONICS AT LIGHT LOADS                                                                              |
| 82231829     | Granted     | 2463430       | 5/21/2008   | 40961      | 1000808.4          | GB | A Modular High-density Computer System                                                                                 |
| 82277963     | Granted     | 1526679       | 10/21/2003  | 39260      | 3292628.9          | GB | Methods Relating To The Monitoring Of Computer Systems                                                                 |
| 82251617     | Granted     | 811211        | 2/12/1996   | 10/16/2002 | 96906429.4         | GB | System and Method for Electronic Transfer of Funds Using An Automated Teller Machine to Dispense the Transferred Funds |
| 82257110     | Granted     | 2024950       | 4/27/2007   | 6/2/2010   | 7761477.4          | GB | In-transit Two-way Route Communication Between A Handheld Positioning Device And A Service Provider                    |
| 82190315     | Granted     | 2423442       | 1/26/2006   | 40149      | 601519.2           | GB | Information Technology (IT) Equipment Positioning System                                                               |
| 83136238     | Published   |               | 6/7/2010    |            | 1221240.3          | GB | MODULE AND PORT                                                                                                        |
| 83543107     | Granted     | 2503592       | 4/27/2011   | 7/22/2015  | 1315642.7          | GB | Rotational Lockout                                                                                                     |
| 83874493     | Granted     | 1741139       | 4/25/2005   | 7/16/2014  | 5740296.8          | GB | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures                                |
| 82127630     | Granted     | 811931        | 6/4/1997    | 5/2/2003   | 97303797.1         | GB | EXPANSION CARD INSERTION AND REMOVAL                                                                                   |
| 82892354     | Granted     | 2482842       | 6/19/2009   | 7/25/2012  | 1121407.9          | GB | Enclosure Power Controller                                                                                             |
| 82064075     | Granted     | 2377048       | 6/30/2001   | 5/4/2005   | 116063.9           | GB | Method Of Utilisation Of A Data Storage Array, And Array Controller Therefor                                           |
| 82218590     | Granted     | 2437649       | 4/26/2007   | 3/30/2011  | 708132.6           | GB | Compatibility Enforcement In Clustered Computing Systems                                                               |
| 82729621     | Granted     | 1008859       | 11/15/1999  | 5/4/2011   | 99309055.4         | GB | Private Arbitrated Loop Self-test Management For A Fibre Channel Storage Enclosure                                     |
| 82786346     | Granted     | 869426        | 3/30/1998   | 7/13/2011  | 98302442.3         | GB | APPARATUS AND METHOD FOR STORAGE SUBSYSTEM DRIVE MOVEMENT AND VOLUME ADDITION                                          |
| 82098101     | Granted     | 2405715       | 8/27/2004   | 6/14/2006  | 419187             | GB | Circuit And System For Addressing Memory Modules                                                                       |
| 82065758     | Granted     | 2382258       | 10/8/2002   | 9/1/2004   | 223255.1           | GB | Traffic Manipulation By Adding Traffic                                                                                 |

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|--------------|---------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82036913     | Granted | 967758        | 4/8/1999    | 11/30/2005 | 99302754.9         | GB | Link Control State Machine For Controlling A Media Access Controller, A Serial Physical Layer Device And A Media Independent Interface Physical Layer Device |
| 82274405     | Granted | 2411540       | 2/25/2004   | 3/29/2006  | 404159.6           | GB | Cascade Control System for Network Units                                                                                                                     |
| 82274594     | Granted | 2424144       | 3/11/2005   | 12/31/2008 | 505050.5           | GB | Packet diversion in switching fabrics and multiple forwarding instructions for packets                                                                       |
| 82064387     | Granted | 2377317       | 7/7/2001    | 9/8/2004   | 116659.4           | GB | Use Of Digital Peak Detect In Sampled Data Read Channels For Asynchronous Detection Of Tones And For Format Navigation                                       |
| 82064765     | Granted | 2380596       | 7/3/2002    | 7/27/2005  | 215348.4           | GB | Data Backup                                                                                                                                                  |
| 82094666     | Granted | 2390195       | 6/25/2003   | 10/26/2005 | 314749.3           | GB | Data Recovery                                                                                                                                                |
| 82097474     | Granted | 2397412       | 12/30/2003  | 12/14/2005 | 330183.5           | GB | Storage System With LUN Virtualization                                                                                                                       |
| 82175888     | Granted | 2407696       | 11/1/2004   | 7/18/2007  | 424184             | GB | Tape Cartridge                                                                                                                                               |
| 82198931     | Granted | 2425217       | 4/15/2005   | 6/15/2011  | 507592.4           | GB | Temporal Mappings For Host Access / Secure Manager                                                                                                           |
| 82244438     | Granted | 2461899       | 7/17/2008   | 12/21/2011 | 813026.2           | GB | Controlling Motion Of Storage Media                                                                                                                          |
| 82900684     | Granted | 1324172       | 12/19/2002  | 2/8/2012   | 225877.8           | GB | System And Method For Securing Fiber Channel Drive Access In A Partitioned Data Library                                                                      |
| 82251998     | Granted | 1108238       | 7/15/1999   | 1/17/2007  | 99934061.5         | GB | System and Method for Selectively Defining Access to Application Features                                                                                    |
| 83120022     | Granted | 2361465       | 10/15/2008  | 8/29/2012  | 8875183.9          | GB | Retrieving Configuration Records From A Configuration Management Database                                                                                    |
| 81968930     | Granted | 2371646       | 9/10/2001   | 11/17/2004 | 121847.8           | GB | Testing Of Policy Prior To Deployment In A Policy-Based Network Management System                                                                            |
| 82070627     | Granted | 1168711       | 6/19/2000   | 8/20/2008  | 410066.5           | GB | Process For Controlling Devices Of An Intranet Network Through The Web                                                                                       |
| 82171829     | Granted | 2406465       | 8/25/2004   | 2/22/2006  | 418975.9           | GB | System And Method Of Network Fault Monitoring                                                                                                                |
| 82062515     | Granted | 1281270       | 5/8/2001    | 7/19/2006  | 1925734.4          | GB | Operating A Communications Infrastructure On A Pre-payment Basis                                                                                             |
| 82071068     | Granted | 1309142       | 10/30/2001  | 6/20/2007  | 1410140.6          | GB | Communication System And Method                                                                                                                              |
| 82174076     | Granted | 2427490       | 6/8/2006    | 8/25/2010  | 611335.1           | GB | Network Usage Management System And Method                                                                                                                   |
| 82186754     | Granted | 1528745       | 10/30/2003  | 12/2/2009  | 3292712.1          | GB | Communication Method And Apparatus                                                                                                                           |
| 82211912     | Granted | 1869864       | 4/3/2006    | 8/6/2008   | 6749186            | GB | Multimedia Transfer For Wireless Networks                                                                                                                    |
| 82212602     | Granted | 1874065       | 6/30/2006   | 12/29/2010 | 6300735.5          | GB | SIGNALING SYSTEM AND METHOD                                                                                                                                  |
| 82392132     | Granted | 1617410       | 7/11/2005   | 11/24/2010 | 5254326.1          | GB | Allocation Of Speech Recognition Tasks And Combination Of Results Thereof                                                                                    |
| 83221479     | Granted | 1650590       | 10/20/2004  | 4/17/2013  | 4300698            | GB | METHOD AND APPARATUS FOR ROUTING SHORT MESSAGES IN MOBILE TELEPHONE NETWORKS                                                                                 |
| 83929727     | Granted | 1986409       | 3/13/2008   | 5/7/2014   | 8004715.2          | GB | A Method, Apparatus And Software For Providing Communications Between A Packet Switched Network And A Public Switched Telephone Network                      |

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|--------------|---------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82065824     | Granted | 2389481       | 6/4/2003    | 12/28/2005 | 312767.7           | GB | Method Of Maintaining Availability Of Requested Network Resources                                                                                      |
| 82089548     | Granted | 2391975       | 6/12/2003   | 1/4/2006   | 313626.4           | GB | A Method For Electronic Tracking Of An Electronic Device                                                                                               |
| 82098350     | Granted | 2404264       | 7/7/2004    | 10/25/2006 | 415283.1           | GB | Systems And Methods For Monitoring Resource Utilization And Application Performance                                                                    |
| 82099658     | Granted | 2398212       | 1/16/2004   | 11/16/2005 | 400999.9           | GB | A System For Deploying A Virtual Private Network                                                                                                       |
| 82161646     | Granted | 723231        | 1/15/1996   | 7/11/2001  | 96300261.3         | GB | METHOD AND APPARATUS FOR PREVENTING INADVERTENT CHANGES TO SYSTEM-CRITICAL FILES IN A COMPUTING SYSTEM                                                 |
| 82204673     | Granted | 2431845       | 10/24/2006  | 3/23/2011  | 621172.6           | GB | Device Storing Vector Images With Embedded Image Style Identifier, And Methods And Utilities For Formatting A Device Image With Image Style Attributes |
| 82208792     | Granted | 1708090       | 3/20/2006   | 3/3/2010   | 6111395.7          | GB | Method And Apparatus For Direct Input And Output In A Virtual Machine Environment                                                                      |
| 82847508     | Granted | 1859346       | 3/4/2005    | 1/11/2012  | 5733005.2          | GB | A Method And Apparatus For Facilitating Pipeline Throughput                                                                                            |
| 82085051     | Granted | 2394121       | 9/23/2003   | 12/7/2005  | 322290.8           | GB | Circuit Board Support Arrangement, Method, And Method For Using The Same                                                                               |
| 82103345     | Granted | 2402771       | 6/4/2004    | 8/30/2006  | 412571.2           | GB | Interconnecting Apparatus For Server Computer Systems                                                                                                  |
| 81976424     | Granted | 2380837       | 7/29/2002   | 5/18/2005  | 217530.5           | GB | System And Method For Developing Customized Integration Tests And Network Peripheral Device Evaluations                                                |
| 82249871     | Granted | GB2466178     | 12/5/2008   | 10/10/2012 | 822243.5           | GB | Data Centre And Apparatus And Method For Data Centre Cooling                                                                                           |
| 81993524     | Granted | 2375412       | 3/8/2002    | 3/23/2005  | 205555.6           | GB | Redundant Controller Data Storage System Having System And Method For Handling Controller Resets                                                       |
| 82004390     | Granted | 1495270       | 4/16/2003   | 3/12/2008  | 3724032.2          | GB | Using Pattern Recognition Techniques For Energy Management In Large Data Centers                                                                       |
| 82042223     | Granted | 1056086       | 4/18/2000   | 6/22/2005  | 303272.9           | GB | Modular Data Storage System Utilizing A Wireless Cartridge Access Device                                                                               |
| 82253489     | Granted | 1436956       | 10/15/2002  | 12/10/2008 | 2793789.5          | GB | Method And System For Communicating Telematics Messages                                                                                                |
| 82190939     | Granted | 2415523       | 6/7/2005    | 10/29/2008 | 511574.6           | GB | System And Method For Sharing Storage Resources Between Multiple Files                                                                                 |
| 82065200     | Granted | 1237332       | 3/2/2001    | 11/5/2003  | 1301921.1          | GB | Beacon Based Web Services II                                                                                                                           |
| 82066010     | Granted | 2376765       | 6/19/2001   | 12/29/2004 | 114855.6           | GB | Multiple Trusted Computing Environments With Verifiable Environment Identities                                                                         |
| 82171331     | Granted | 2400526       | 4/8/2003    | 12/21/2005 | 308073.6           | GB | Key History Tree: Efficient Shared-key Management With Off-line Group Members                                                                          |
| 82208228     | Granted | 1720315       | 4/27/2006   | 7/9/2008   | 6113237.9          | GB | Network Management And Administration                                                                                                                  |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------|
| 82259177     | Published |               | 6/30/2009   |            | 911276.4           | GB | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same                                |
| 82743836     | Granted   | 1875476       | 4/25/2006   | 7/27/2011  | 6751576.7          | GB | Three-dimensional Nanoscale Crossbars                                                                                  |
| 82997369     | Granted   | 2096672       | 1/26/2007   | 40758      | 9006878.4          | GB | MIXED-SCALE ELECTRONIC INTERFACE                                                                                       |
| 83781701     | Granted   | 2311094       | 7/31/2008   | 1/1/2014   | 8794914.5          | GB | MULTI-LAYER RECONFIGURABLE SWITCHES                                                                                    |
| 84077567     | Published |               | 7/30/2012   |            | 1418164.8          | GB | PROVIDING AGREEMENT INFORMATION TO ALLOW ACCESS BY A CLIENT DEVICE OF SELECTED EQUIPMENT FROM AMONG MULTIPLE EQUIPMENT |
| 82207421     | Granted   | 1938429       | 7/21/2006   | 9/30/2009  | 6788057.5          | GB | Method And Apparatus For Electromagnetic Resonance Imaging                                                             |
| 82635094     | Granted   | 2013706       | 4/20/2007   | 40730      | 7755826            | GB | Negative Index Material                                                                                                |
| 82678698     | Granted   | 2013707       | 4/20/2007   | 7/6/2011   | 7755829.4          | GB | Self-authenticating Quantum Random Bit Generators                                                                      |
| 83223394     | Granted   | 2212887       | 10/23/2008  | 4/17/2013  | 8842157.3          | GB | Optical-based, Self-authenticating Quantum Random Number Generators                                                    |
| 82729658     | Granted   | 1558937       | 11/7/2003   | 8/24/2011  | 3783255.7          | GB | Three-dimensional Memory/Module Architectures                                                                          |
| 83988224     | Granted   | 2321934       | 10/28/2009  | 6/25/2014  | 9752028.2          | GB | Active Network Defense System and Method                                                                               |
| 82098665     | Granted   | 2400942       | 3/31/2004   | 12/14/2005 | 407333.4           | GB | Distributed Packet Flow Inspection and Processing                                                                      |
| 82948587     | Granted   | 2052337       | 10/2/2006   | 7/6/2011   | 6815926.8          | GB | Processor Type Determination                                                                                           |
| 8225397      | Granted   | 2439572       | 6/29/2006   | 3/9/2011   | 612848.5           | GB | RETRO-FITTING SYNTHETIC FULL COPIES OF DATA                                                                            |
|              |           |               |             |            |                    |    | REMOTE CONNECTION BETWEEN INTERMEDIARY DEVICE AND COMPUTING DEVICE VIA CENTRAL AUTHORITY SOFTWARE                      |
| 83781761     | Granted   | 1220088       | 12/19/2001  | 6/3/2009   | 1310644.8          | GB | Circuit And Method For Supporting Misaligned Accesses In The Presence Of Speculative Load Instructions                 |
| 83881904     | Granted   | 2509661       | 10/27/2011  | 10/7/2015  | 1407328.2          | GB | SHIFTABLE MEMORY EMPLOYING RING REGISTERS                                                                              |
| 81978848     | Granted   | 2373090       | 3/1/2002    | 9/8/2004   | 204897.3           | GB | Position Control For Plunge Mechanism                                                                                  |
| 82061567     | Granted   | 2367182       | 9/20/2000   | 5/26/2004  | 23048.2            | GB | Improvements In And Relating To Data Protection                                                                        |
| 82062569     | Granted   | 2372873       | 10/29/2001  | 12/15/2004 | 125891.2           | GB | Improvements Relating To Data Readers                                                                                  |
| 82064381     | Granted   | 2378307       | 8/3/2001    | 6/1/2005   | 116068.8           | GB | Format Navitation By Majority Voting Across Multiple Read Channels                                                     |
| 82068314     | Granted   | 1066634       | 4/1/1998    | 12/12/2001 | 98913957.1         | GB | AFN Append Point                                                                                                       |
| 82084481     | Granted   | 1508860       | 3/3/2004    | 5/23/2007  | 4004995.9          | GB | Method And Apparatus For Managing Device Reservation (as Amended)                                                      |
| 82088105     | Granted   | 1492104       | 12/29/2003  | 3/4/2009   | 3029948.1          | GB | Cartridge-handling Apparatus For A Media Storage System                                                                |
| 82228139     | Granted   | 2446182       | 1/31/2007   | 12/28/2011 | 701781.7           | GB | Data Transfer Apparatus For Use With Tape Cartridges And Tape Cartridges For Use With Such Data Transfer Apparatus     |
| 82232321     | Granted   | GB2450340     | 6/20/2007   | 10/3/2012  | 711860.7           | GB | Method For Changing The Configuration Of A Media Drive Apparatus, Computer Readable Medium, And Media Drive Apparatus  |
| 82240436     | Granted   | 2457670       | 2/20/2008   | 1/4/2012   | 803052             | GB | Data Transfer Device                                                                                                   |
| 82276526     | Granted   | 2401238       | 4/28/2003   | 11/14/2007 | 309551             | GB | Improved Multi-channel MR Head Asymmetry Calibration                                                                   |

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| 82839785     | Granted   | 2489292       | 2/20/2008   | 11/7/2012  | 1118575.8 GB       |    | Data Transfer Device                                                                                                      |
| 81986342     | Granted   | 2375853       | 12/7/2001   | 2/16/2005  | 129380.2 GB        |    | Authoring Tool For Bayesian Network Diagnostic Systems                                                                    |
| 83139209     | Granted   | 1484682       | 6/2/2003    | 12/5/2012  | 3291306.3 GB       |    | Method And Apparatus For Providing Support For An Electronic Device                                                       |
| 82938256     | Granted   | 2488636       | 12/28/2009  | 1/8/2014   | 1202586.2 GB       |    | A SYSTEM FOR PROVIDING PHYSICALLY SEPARATED COMPUTE AND I/O RESOURCES IN THE DATACENTER TO ENABLE SPACE AND POWER SAVINGS |
| 83995646     | Published |               | 1/31/2012   |            | GB1412874.8 GB     |    | MEMORY MODULE BUFFER DATA STORAGE                                                                                         |
| 82103651     | Granted   | 1560225       | 6/28/2004   | 2/4/2009   | 4015147.4 GB       |    | Method And Apparatus For Reducing Soft Errors                                                                             |
| 82199855     | Granted   | 2422461       | 1/20/2006   | 39694      | 601112.6 GB        |    | Systems And Methods For Maintaining Performance                                                                           |
| 82206602     | Granted   | 2429552       | 8/2/2006    | 9/1/2010   | 615369.6 GB        |    | Start/stop Circuit For Performance Counter                                                                                |
| 82235381     | Granted   | 2451549       | 7/7/2008    | 2/1/2012   | 812407.5 GB        |    | Hardward Device Data Buffer                                                                                               |
| 83213143     | Granted   | 2260364       | 4/2/2008    | 3/20/2013  | 8744891.6 GB       |    | Converting Resets In Shared I/O System                                                                                    |
| 83874029     | Granted   | 2248230       | 2/29/2008   | 4/16/2014  | 8731153.6 GB       |    | Modular System And Retractable Assembly For Electronic Devices                                                            |
| 84155345     | Granted   | 2497023       | 11/2/2009   | 2/25/2015  | 9850993.8 GB       |    | Multiprocessing Computing With Distributed Embedded Switching                                                             |
| 81988895     | Granted   | 2375633       | 3/8/2002    | 2/2/2005   | 205560.6 GB        |    | Redundant Controller Data Storage System Having Hot Insertion System And Method                                           |
| 82258043     | Granted   | 2470334       | 2/20/2009   | 2/27/2013  | 1015698.2 GB       |    | Method And System For Implementing A Virtual Storage Pool In A Virtual Environment                                        |
| 82578772     | Granted   | 1291780       | 6/12/2002   | 11/14/2007 | 2254085 GB         |    | Node Controller for a Data Storage System                                                                                 |
| 83793388     | Published |               | 10/25/2011  |            | 1404024 GB         |    | DRIVE CARRIER LIGHT SOURCE CONTROL                                                                                        |
| 83787165     | Granted   | 2288996       | 4/28/2008   | 1/29/2014  | 8754129.8 GB       |    | Virtual-interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                                            |
| 83874318     | Granted   | 2255291       | 2/18/2008   | 41745      | 8730074.5 GB       |    | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device                           |
| 82271717     | Granted   | 2362245       | 11/30/2000  | 2/18/2004  | 119018 GB          |    | FIFO Based Network Interface Supporting Out-of-Order Processing                                                           |
| 82266596     | Granted   | 990206        | 5/28/1998   | 10/25/2006 | 98924930.5 GB      |    | Multilayer Firewall System                                                                                                |
| 82270907     | Granted   | 2350027       | 5/8/1999    | 7/18/2001  | 9910582.7 GB       |    | Monitoring of Connection Between Network Devices In A Packet-Based Communication System                                   |
| 82274465     | Granted   | 2414623       | 5/27/2004   | 5/17/2006  | 411835.2 GB        |    | Distributed bridging with synchronization of forwarding                                                                   |
| 82274522     | Granted   | 2420468       | 11/17/2004  | 4/29/2009  | 425306.8 GB        |    | Packet Metering in High-speed Network Units                                                                               |
| 82274147     | Granted   | 1527626       | 6/30/2003   | 6/2/2010   | 3762222.2 GB       |    | System and Method for a Universal Wireless Access Gateway                                                                 |
| 81969860     | Granted   | 2378310       | 5/30/2002   | 11/24/2004 | 212534.2 GB        |    | Data Storage Methods And Apparatus                                                                                        |
| 81978725     | Granted   | 1195942       | 4/5/2001    | 11/14/2007 | 1108610.5 GB       |    | Device Detection System And Method                                                                                        |
| 82005008     | Granted   | 1383121       | 7/11/2003   | 5/12/2010  | 3254395.1 GB       |    | Intrusion Monitors For Media Storage Systems                                                                              |

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|--------------|---------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------|
| 82815955     | Granted | 1913509       | 8/5/2005    | 10/19/2011 | 5778416.7          | GB | System, Method And Apparatus To Obtain A Key For Encryption/decryption/data Recovery From An Enterprise Cryptography Key Management System  |
| 83164613     | Granted | 1846867       | 1/20/2006   | 1/9/2013   | 6719098.3          | GB | Non-invasive Method And System For Automated Administration Of Diverse Security Constrained Servers                                         |
| 82249304     | Granted | 2464284       | 10/8/2008   | 4/17/2013  | 818404.6           | GB | Data Centre Cooling Apparatus And Method                                                                                                    |
| 82901634     | Granted | 2485490       | 8/31/2009   | 8/20/2014  | 1122155.3          | GB | SURFACE-MOUNT TECHNOLOGY (SMT) DEVICE CONNECTION                                                                                            |
| 82200665     | Granted | 2419700       | 10/29/2004  | 3/31/2010  | 424137.8           | GB | Method For Indexing Data, Systems, Software And Apparatus Relating Thereto                                                                  |
| 83810199     | Granted | 1884872       | 7/13/2007   | 2/26/2014  | 7013794.8          | GB | Method And System For Using Application Development Data To Instantiate Support Information                                                 |
| 84058059     | Granted | 2460105       | 7/30/2009   | 10/1/2014  | 9847912.4          | GB | Constructing A Bayesian Network Based On Received Events Associated With Network Entities                                                   |
| 81986900     | Granted | 2371440       | 10/24/2001  | 9/22/2004  | 125507.4           | GB | Method And System For Identifying And Processing Changes To A Network Topology                                                              |
| 82060070     | Granted | 1257087       | 5/10/2001   | 9/12/2007  | 1111444.4          | GB | Method, Computer System And Computer Program For Monitoring Objects In An IT Network                                                        |
| 82062755     | Granted | 2368930       | 10/17/2000  | 4/6/2005   | 25452.4            | GB | Establishment Of A Deferred Network Communication Session                                                                                   |
| 82100468     | Granted | 1414194       | 10/22/2002  | 12/13/2006 | 2354168.3          | GB | Method And Apparatus For Operating A Telecommunication Platform                                                                             |
| 82198604     | Granted | 1686813       | 1/31/2005   | 7/16/2008  | 5300075.8          | GB | Signalling Point                                                                                                                            |
| 82202228     | Granted | 2422218       | 1/14/2005   | 12/23/2009 | 500716.6           | GB | A Common User Repository With Data Linked By Trust Relationships                                                                            |
| 82662207     | Granted | 1665824       | 7/23/2004   | 3/2/2011   | 4766305.9          | GB | Methods And Apparatus For Controlling Signalling Gateways                                                                                   |
| 82718563     | Granted | 1274259       | 7/6/2001    | 6/29/2011  | 1410085.3          | GB | Multi-service Telecommunications System And Associated Methods                                                                              |
| 82837120     | Granted | 1632075       | 5/18/2004   | 9/14/2011  | 4733568.2          | GB | Method And Apparatus For Load-balancing                                                                                                     |
| 82855474     | Granted | 2301277       | 6/12/2009   | 10/12/2011 | 9761506.6          | GB | Improvements In Or Relating To Communications                                                                                               |
| 83136103     | Granted | 2015553       | 7/10/2008   | 11/28/2012 | 8160071            | GB | Reverse Billing Of Messages Delivered To A Mobile Device                                                                                    |
| 83748542     | Granted | 1858266       | 5/18/2006   | 11/13/2013 | 6300494.9          | GB | Method And Gateway For Sending Subsystem Allowed And Subsystem Prohibited SSCP Management Messages For Distributed SSCP Application Servers |
| 83785187     | Granted | 1976232       | 3/30/2007   | 1/22/2014  | 7300912.8          | GB | SIGNALING STATUS INFORMATION OF AN APPLICATION SERVICE                                                                                      |
| 84251698     | Granted | 2143259       | 1/29/2008   | 5/27/2015  | 8708351.5          | GB | Method And System For Facilitating Multi-point Communications                                                                               |
| 82065812     | Granted | 2386738       | 3/18/2002   | 9/21/2005  | 206404.6           | GB | Lower Cost Streaming Media Playback Infrastructure                                                                                          |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 81971858     | Granted     | 2368690       | 6/26/2001   | 12/21/2005 | 115612.4           | GB | Demand Responsive Method And Apparatus To Automate                                                                                              |
| 82051517     | Granted     | 1130491       | 12/4/2000   | 3/8/2006   | 310771.1           | GB | Activate Spare Servers                                                                                                                          |
| 82098656     | Granted     | 2408407       | 10/21/2004  | 5/24/2006  | 423434             | GB | Method And Apparatus For Providing Field Confidentiality In Digital Certificates                                                                |
| 82199297     | Granted     | 2425694       | 4/13/2006   | 1/13/2010  | 607366.2           | GB | Smart Translation Of Generic Configurations                                                                                                     |
| 82203353     | Granted     | 2437145       | 9/20/2006   | 11/24/2010 | 618517.7           | GB | Method And An Apparatus For Securely Communicating Between A Management Server And A Managed Node Associated With A Dynamic Provisioning System |
| 82203854     | Granted     | 2431846       | 10/24/2006  | 12/8/2010  | 621174.2           | GB | Method And Apparatus For Dynamically Allocating Resources Used By Software                                                                      |
| 82204787     | Granted     | 2432498       | 10/24/2006  | 12/21/2011 | 621176.7           | GB | Utilities, Methods And Device Providing Vector Images That May Be Updated To Reflect The Status Of A Device                                     |
| 84211163     | Granted     | 2248029       | 2/26/2008   | 4/8/2015   | 8726109.5          | GB | Utility, Method And Device Providing Vector Images That May Be Formatted For Display In Different Locales                                       |
| 90037716     | Granted     | 2176773       | 7/7/2008    | 9/2/2015   | 8808136.9          | GB | Method And Apparatus For Performing A Host Enumeration Process                                                                                  |
| 81992954     | Granted     | 2380108       | 7/30/2002   | 11/17/2004 | 217624.6           | GB | Data Packet Processing Method For A Multi Core Processor                                                                                        |
| 81993893     | Granted     | 2381611       | 7/30/2002   | 5/25/2005  | 217602.2           | GB | Server System With Segregated Management Lan And Payload Lan                                                                                    |
| 82128185     | Granted     | 811932        | 6/4/1997    | 4/9/2003   | 97303798.9         | GB | Server System With Multiple Management User Interfaces                                                                                          |
| 83209021     | Granted     | 2498281       | 11/1/2010   | 4/8/2015   | 1305158.6          | GB | CONNECTING EXPANSION CARDS                                                                                                                      |
| 84105776     | Granted     | 2480977       | 9/25/2009   | 11/5/2014  | 9849912.2          | GB | STORAGE ELEMENT READING USING RING OSCILLATOR                                                                                                   |
| 82077368     | Granted     | 907935        | 4/24/1997   | 8/24/2005  | 97922456.5         | GB | MAPPING NON-PREFETCHABLE STORAGE LOCATIONS INTO MEMORY MAPPED INPUT/OUTPUT SPACE                                                                |
| 82187120     | Granted     | 2424734       | 3/29/2006   | 7/8/2009   | 606128.7           | GB | A System And Method For Secure Network Electronic Payment And Credit Collection                                                                 |
| 82193984     | Granted     | 1446802       | 10/16/2002  | 10/15/2008 | 2770159.8          | GB | PERFORMANCE MONITORING OF A PIPELINED PROCESSOR USING INSTRUCTION RECORDS                                                                       |
| 82273397     | Granted     | 2372680       | 2/27/2001   | 2/19/2003  | 104837             | GB | Recording And/or Reproducing Device Comprising A Coated Tape Guide                                                                              |
| 84088604     | Application |               | 4/23/2012   |            | 1419222.3          | GB | Calculation and Transmission of Error Check Codes                                                                                               |
| 82099091     | Granted     | 2422520       | 1/21/2005   | 9/9/2009   | 501248.9           | GB | STATISTICAL ANALYSIS USING A GRAPHICS PROCESSING UNIT                                                                                           |
| 82169198     | Granted     | 2401280       | 4/29/2003   | 38756      | 309844.9           | GB | Method And System For Contained Cryptographic Separation                                                                                        |
| 82198541     | Granted     | 1605626       | 6/6/2005    | 12/26/2007 | 5104894            | GB | Propagation Of Virus Through An Information Technology Network                                                                                  |
| 82213901     | Granted     | 2432433       | 10/29/2005  | 4/7/2010   | 522100.7           | GB | Cryptographic Method And Apparatus                                                                                                              |
|              |             |               |             |            |                    |    | A METHOD OF PROVIDING A VALIDATABLE DATA STRUCTURE                                                                                              |

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| 82220270     | Granted   | 2443516       | 10/17/2007  | 4/13/2011  | 720234.4           | GB | NETWORK ADMINISTRATION                                                                                                 |
| 82223645     | Granted   | 2442546       | 7/18/2007   | 3/23/2011  | 713877.9           | GB | Authenticated Encryption Method And Apparatus                                                                          |
| 82276397     | Granted   | 2391139       | 7/14/2003   | 10/12/2005 | 316390.4           | GB | Method And Apparatus For Securely Transferring Data                                                                    |
| 82738932     | Granted   | 2227862       | 10/14/2008  | 3/30/2011  | 8806753.3          | GB | Data Processing Arrangements For Use In Data Communication Apparatus In Connection With Error Correction               |
| 82172576     | Granted   | 1741248       | 4/28/2005   | 9/16/2009  | 5738071.9          | GB | Assigning Wan Links To Subflows Based On Wan Link Characteristics And Application Preferences                          |
| 84103280     | Published |               | 7/31/2012   |            | 1421129.6          | GB | VIRTUAL MACHINE DATA PACKET ENCAPSULATION AND DECAPSULATION                                                            |
| 82094657     | Granted   | 1652334       | 7/22/2004   | 11/21/2007 | 4743493.1          | GB | Improvements Relating To Quantum Cryptography                                                                          |
| 82175504     | Granted   | 2422022       | 10/6/2004   | 39316      | 607194.8           | GB | Photonic Interconnect System                                                                                           |
| 82175510     | Granted   | 2436242       | 10/6/2004   | 12/5/2007  | 710983.8           | GB | Photonic Interconnect System                                                                                           |
| 83694931     | Granted   | 2013708       | 4/20/2007   | 10/16/2013 | 7775953.8          | GB | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                    |
| 82579296     | Granted   | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2          | GB | Pattern Discovery In A Network Security System                                                                         |
| 82128620     | Granted   | 825536        | 8/13/1997   | 2/5/2003   | 97306154.2         | GB | A SERVER CONTROLLER CONFIGURED TO SNOOP AND RECEIVE A DUPLICATIVE COPY OF DISPLAY DATA PRESENTED TO A VIDEO CONTROLLER |
| 82947668     | Published |               | 8/30/2011   |            | 1114879.8          | GB | AUTOMATED PARSING OF E-MAIL MESSAGES                                                                                   |
| 83229044     | Granted   | 1792530       | 8/30/2005   | 3/6/2013   | 5792647.9          | GB | CRAC Unit Control Based On Re-circulation Index                                                                        |
| 82184936     | Granted   | 2418502       | 9/13/2005   | 39680      | 518663             | GB | Responding To DC Power Degradation                                                                                     |
| 82085789     | Granted   | 2391582       | 6/10/2003   | 8/17/2005  | 313370.9           | GB | Fan-Securing Device For Use With A Heat Transfer Device                                                                |
| 82901717     | Published |               | 2/26/2010   |            | 1200849.6          | GB | MIXED-FLOW DUCTED FAN                                                                                                  |
| 82068626     | Granted   | 2344441       | 8/6/1999    | 4/30/2003  | 6902.1             | GB | System For Improved Data Backup And Recovery                                                                           |
| 82090718     | Granted   | 1480223       | 1/19/2004   | 39897      | 4001012.6          | GB | Modular Storage Library With Automatic Configuration                                                                   |
| 82094339     | Granted   | 2396739       | 12/20/2003  | 10/26/2005 | 329578.9           | GB | Writing And Reading Data In A Data Storage Format                                                                      |
| 82094462     | Granted   | 2409330       | 12/15/2004  | 9/26/2007  | 427495.7           | GB | Tape Head Assembly                                                                                                     |
| 82199477     | Granted   | 2431284       | 10/15/2005  | 6/4/2008   | 521005.9           | GB | Tape Deployment Systems And Methods Of Deploying Tape In Digital Data Transfer Apparatus                               |
| 82201100     | Granted   | 2422923       | 2/3/2005    | 10/29/2008 | 502176.1           | GB | Detailed Feedback Of Data Channel Performance Metrics To Solutions Software                                            |
| 82202222     | Granted   | 2425394       | 4/21/2005   | 9/19/2007  | 508026.2           | GB | Data Transfer Apparatus Head Cleaning                                                                                  |
| 82244546     | Granted   | 2461049       | 6/18/2008   | 11/7/2012  | 811142.9           | GB | DETECTING TAPE CONDITION IN A TAPE DATA TRANSFER APPARATUS                                                             |
| 82644405     | Granted   | 1460440       | 10/9/2003   | 12/8/2010  | 3022910.8          | GB | Apparatus For Sensing The Presence Of An Inductive Load Driven By A Pulse Width Modulated Signal                       |
| 83185317     | Granted   | 1715488       | 12/17/1998  | 2/11/2009  | 6011256.8          | GB | Tape Leader Pin Assembly And Method For Making The Same                                                                |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------|
| 83821056     | Granted   | 1592004       | 4/27/2005   | 3/12/2014  | 5103461.9          | GB | METHOD AND APPARATUS FOR RECORDING DATA ONTO A RECORDING MEDIUM INCLUDING WARNING OF THE APPROACH TO AN END OF MEDIUM POSITION |
| 83136246     | Published |               | 6/7/2010    |            | 1220986.2          | GB | MODULE AND PORT                                                                                                                |
| 83984216     | Published |               | 1/6/2012    |            | 1411836.8          | GB | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION                     |
| 82084970     | Granted   | 2393292       | 7/17/2003   | 38686      | 316794.7           | GB | Hardware Based Utilization Metering                                                                                            |
| 82128737     | Granted   | 854611        | 12/30/1997  | 38336      | 97310656           | GB | NETWORK SWITCH WITH MULTIPLE BUS ARCHITECTURE                                                                                  |
| 82208339     | Granted   | 2428826       | 7/5/2006    | 3/18/2009  | 613379.7           | GB | Timestamp Generator                                                                                                            |
| 82233749     | Granted   | 2463848       | 5/21/2008   | 6/27/2012  | 1002386.9          | GB | TAMPER-EVIDENT CONNECTOR                                                                                                       |
| 81993632     | Granted   | 2411058       | 11/1/2002   | 11/30/2005 | 509636.7           | GB | BATTERY CHARGING AND DISCHARGING SYSTEM                                                                                        |
| 82129487     | Granted   | 848316        | 12/11/1997  | 5/8/2002   | 97310024.1         | GB | SYSTEM AND METHOD FOR SECURE INFORMATION OVER A NETWORK                                                                        |
| 83853751     | Published |               | 10/25/2011  |            | 1406294.7          | GB | DRIVE CARRIER TOUCH SENSING                                                                                                    |
| 81986522     | Granted   | 1417783       | 8/13/2002   | 1/12/2005  | 2757123.1          | GB | Asymmetric Wireless Communication System Using Two Different Radio Technologies                                                |
| 82276640     | Granted   | 2391767       | 7/28/2003   | 38189      | 317578.3           | GB | Notification Of Wireless Hotspots                                                                                              |
| 82266341     | Granted   | 855115        | 10/11/1996  | 7/6/2005   | 96936429.8         | GB | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS                         |
| 82268339     | Granted   | 2333931       | 1/22/1999   | 5/7/2003   | 9901325.2          | GB | Logical Switch Set                                                                                                             |
| 82274333     | Granted   | 2406742       | 10/3/2003   | 3/22/2006  | 323154.5           | GB | Switching Fabrics and Control Protocols for them                                                                               |
| 82061684     | Granted   | 1162537       | 6/9/2000    | 9/26/2007  | 304891.5           | GB | Utilization Of Unused Disk Space On Networked Computers                                                                        |
| 82233314     | Granted   | 2466580       | 10/25/2007  | 1/2/2013   | 1000247.5          | GB | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                        |
| 82261652     | Granted   | 2481807       | 7/6/2010    | 3/25/2015  | 1011319.9          | GB | Protecting File Entities                                                                                                       |
| 81978905     | Granted   | 1239479       | 1/28/2002   | 10/12/2005 | 2250543.2          | GB | Apparatus And Method For Retrieving Data Cartridge Information External To A Media Storage System                              |
| 82028288     | Granted   | 940807        | 3/3/1999    | 5/26/2010  | 99301613.8         | GB | Linear Speed Measurement Independent Of Lateral Position In Linear Tape Systems                                                |
| 82047887     | Granted   | 2085210       | 7/23/1999   | 1/5/2000   | 2085210            | GB | Bezel For Rack Mounted Device                                                                                                  |
| 83721500     | Granted   | 2011042       | 4/25/2007   | 11/6/2013  | 7756008.4          | GB | Distributed Differential Store With Non-distributed Objects And Compression-enhancing Data-object Routing                      |
| 81956549     | Granted   | 750253        | 6/11/1996   | 4/3/2002   | 96109337.4         | GB | Method And Apparatus For Shared Management Information Via A Common Repository                                                 |
| 82038023     | Granted   | 961197        | 12/10/1998  | 8/13/2003  | 98123600.3         | GB | User Interface Mechanism For Manipulating Context In Computer Management Applications                                          |



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| 82106516     | Granted     | 2409602       | 12/16/2004  | 5/24/2006  | 427596.2           | GB | Method And System For Communicating Between A Management Station And At Least Two Networks Having Duplicate Internet Protocol Addresses |
| 82189793     | Granted     | 1643680       | 8/31/2005   | 3/19/2008  | 5018947.1          | GB | Method And System For Managing Network Nodes Which Communicate Via Connectivity Services Of A Service Provider                          |
| 82195604     | Granted     | 2420675       | 10/31/2005  | 6/24/2009  | 522161.9           | GB | MPLS VPN Fault Management Using IGP Monitoring System                                                                                   |
| 82062560     | Granted     | 1197858       | 10/10/2000  | 2/6/2008   | 308910.9           | GB | E-appliances                                                                                                                            |
| 82062746     | Granted     | 2368224       | 10/17/2000  | 8/25/2004  | 25454              | GB | Content Provider Entity For Communication Session                                                                                       |
| 82168943     | Granted     | 2406244       | 9/3/2004    | 10/31/2007 | 419623.4           | GB | Software Authentication For Mobile Communication Devices                                                                                |
| 82171193     | Granted     | 2407734       | 10/19/2004  | 5/31/2006  | 423199.9           | GB | Selective Message Discard                                                                                                               |
| 82186736     | Granted     | 1706978       | 7/12/2004   | 9/10/2008  | 4766194.7          | GB | Method And Apparatus For Load-balancing                                                                                                 |
| 82281449     | Granted     | 1553723       | 1/5/2005    | 3/14/2007  | 5250014.7          | GB | Method And System For Modelling A Communications Network                                                                                |
| 82862043     | Granted     | 2018734       | 4/18/2007   | 10/19/2011 | 7755684.3          | GB | Providing Different Network Services To A Network Agent                                                                                 |
| 83004410     | Granted     | 1202176       | 10/31/2000  | 4/25/2012  | 410131.7           | GB | Message-based Software System                                                                                                           |
| 83013561     | Granted     | 1885138       | 7/11/2006   | 6/6/2012   | 6300790            | GB | Signalling Gateway                                                                                                                      |
| 83277113     | Granted     | 1929818       | 7/18/2006   | 6/5/2013   | 6787730.8          | GB | Automated Application Server (AS) Permissions Provisioning                                                                              |
| 84191609     | Application | 2166703       | 9/21/2009   |            | 9170876.8          | GB | Method And System For Managing A Hierarchical Information Base With An Application Layer Protocol                                       |
| 82065809     | Granted     | 2391744       | 6/4/2003    | 10/12/2005 | 312764.4           | GB | Method Of Satisfying A Demand On A Network For A Network Resource                                                                       |
| 82189856     | Granted     | 2431756       | 10/30/2006  | 40401      | 621590.9           | GB | Method And Apparatus For Automatically Evaluating And Allocating Resources In A Cell Based System                                       |
| 82171565     | Granted     | 2405563       | 8/13/2004   | 11/22/2006 | 418160.8           | GB | A Security Intrusion Mitigation System And Method                                                                                       |
| 82204529     | Granted     | 2422225       | 1/13/2006   | 5/20/2009  | 600660.5           | GB | Method For Controlling Resource Utilization And Computer System                                                                         |
| 81993884     | Granted     | 2380838       | 7/30/2002   | 5/25/2005  | 217601.4           | GB | System And Method For Graceful Shutdown Of Host Processor Cards In A Server System                                                      |
| 82085033     | Granted     | 2396955       | 11/5/2003   | 3/8/2006   | 325848             | GB | Cable Systems And Related Methods                                                                                                       |
| 82087100     | Granted     | 2393291       | 6/4/2003    | 9/27/2006  | 312858.4           | GB | Method And System For Providing A Location Of A Data Interface                                                                          |
| 82088657     | Granted     | 2394082       | 6/27/2003   | 10/5/2005  | 315103.2           | GB | System And Method For The Frequency Management Of Computer Systems To Allow Capacity On Demand                                          |
| 82090403     | Granted     | 2392269       | 6/27/2003   | 4/5/2006   | 315099.2           | GB | Management Of Memory Subsystem                                                                                                          |
| 82063556     | Granted     | 2375199       | 2/20/2002   | 2/2/2005   | 203939.4           | GB | Method Of And Apparatus For Ascertaining The Status Of A Data Processing Environment                                                    |
| 82097525     | Granted     | 2398656       | 1/21/2004   | 6/14/2006  | 401194.6           | GB | Improvements In And Relating To Computer Operating System Data Management                                                               |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------|
| 82169192     | Granted     | 2401281       | 4/29/2003   | 2/8/2006   | 309856.3           | GB | Propagation Of Virus Through An Information Technology Network                                          |
| 82191983     | Granted     | 2412754       | 3/30/2004   | 7/11/2007  | 407117.1           | GB | Provision Of Resource Allocation Information                                                            |
| 82219388     | Granted     | 2430847       | 10/28/2005  | 5/5/2010   | 521935.7           | GB | Device With N-time Pad And A Method Of Managing Such A Pad                                              |
| 82276454     | Granted     | 2399906       | 2/26/2004   | 10/4/2006  | 404218             | GB | Method And System For Delegating Authority And Access Control Methods Based On Delegated Authority      |
| 82277135     | Granted     | 1355445       | 3/28/2003   | 10/17/2007 | 3251967            | GB | Method And Apparatus For Encrypting/decrypting Data                                                     |
| 82277204     | Granted     | 2401763       | 7/4/2003    | 8/10/2005  | 417136.9           | GB | Trusted Authority For Identifier-Based Cryptography                                                     |
| 8423076      | Application |               | 6/11/2015   |            | 1510175.1          | GB | MANAGEMENT OF CRYPTOGRAPHIC KEYS                                                                        |
| 83111666     | Published   |               | 6/22/2010   |            | 1218061.8          | GB | A SYSTEM FOR PROVIDING PHYSICALLY SEPARATED COMPUTE AND I/O RESOURCES IN THE DATACENTER                 |
| 82077479     | Granted     | 919048        | 6/17/1997   | 38224      | 97933142.8         | GB | A System, Method And Article Of Manufacture For Multiple-Entry Point Virtual Point Of Sale Architecture |
| 82256846     | Granted     | 1836693       | 1/10/2006   | 39995      | 6717875.6          | GB | RFID VEHICLE MANAGEMENT SYSTEM AND METHOD                                                               |
| 82276889     | Granted     | 2401209       | 4/30/2003   | 10/26/2005 | 309960.3           | GB | A New Model For E-Business                                                                              |
| 84210670     | Granted     | 1695468       | 11/19/2004  | 4/15/2015  | 4816965            | GB | LASER-BASED COMMUNICATIONS WITH A REMOTE INFORMATION SOURCE                                             |
| 82253231     | Granted     | 1381945       | 4/23/2002   | 6/13/2007  | 2726784.8          | GB | Method and System for Reporting XML Data Based on Precomputed Context and a Document Object Model       |
| 82093088     | Granted     | 2393001       | 7/22/2003   | 9/28/2005  | 317110.5           | GB | Method And System For Supporting A Plurality Of Event Types                                             |
| 83037371     | Granted     | 1358584       | 1/29/2002   | 7/27/2011  | 2703292.9          | GB | AN ADAPTIVE DOCUMENT RANKING METHOD BASED ON USER BEHAVIOR                                              |
| 84022799     | Granted     | 2374250       | 1/19/2009   | 10/29/2014 | 9838521.4          | GB | Load Balancing                                                                                          |
| 82093655     | Granted     | 2397447       | 12/30/2003  | 12/28/2005 | 330184.3           | GB | Hot Swap Power Delivery Circuit                                                                         |
| 82859770     | Granted     | 2481752       | 4/27/2009   | 12/4/2013  | 1117696.3          | GB | Electric Power Conversion System Having An Adaptable Transformer Turns Ratio For Improved Efficiency    |
| 82938233     | Granted     | 2492432       | 4/22/2010   | 5/20/2015  | 1202601.9          | GB | System And Method For Balancing Input Current With Parallel Power Supplies                              |
| 83166376     | Published   |               | 9/13/2010   |            | 1301057.4          | GB | POWER RAIL REGULATOR SYSTEM                                                                             |
| 82175123     | Granted     | 2413439       | 3/29/2005   | 10/31/2007 | 506331.8           | GB | Liquid Loop With Multiple Heat Exchangers For Efficient Space Utilization                               |
| 82182491     | Granted     | 2421603       | 11/22/2005  | 39750      | 523752.4           | GB | Apparatus And System For Monitoring Environmental Factors In A Computer System                          |
| 82091282     | Granted     | 2381630       | 6/7/2002    | 3/30/2005  | 304527.5           | GB | Secure Machine Platform That Interfaces To Operating Systems And Customized Control Programs            |
| 82097831     | Granted     | 1466234       | 11/21/2003  | 5/24/2006  | 3812445.9          | GB | Cooling System With Evaporators Distributed In Series                                                   |
| 83808776     | Granted     | 2245516       | 12/21/2007  | 2/12/2014  | 7869793.5          | GB | Moisture Content Control System                                                                         |
| 83862785     | Published   |               | 11/11/2011  |            | 1406360.6          | GB | MANAGING AIRFLOW PROVISIONING                                                                           |

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| 82392463     | Granted   | 1428125       | 9/18/2002   | 11/3/2010  | 2775864.8          | GB | Monitoring In Component-based Systems At Runtime (as Amended)                                                                                                                                                                       |
| 82071356     | Granted   | 1329809       | 1/18/2002   | 39666      | 2354007.3          | GB | Distributed Computing System And Method                                                                                                                                                                                             |
| 82187294     | Granted   | 2419262       | 7/29/2005   | 12/27/2007 | 515630.2           | GB | Authentication System And Method                                                                                                                                                                                                    |
| 82242728     | Granted   | 2458157       | 3/7/2008    | 4/25/2012  | 804259             | GB | Virtual Machine Liveness Check                                                                                                                                                                                                      |
| 82085213     | Granted   | 1460630       | 10/9/2003   | 12/13/2006 | 3022914            | GB | High-density Media Storage System                                                                                                                                                                                                   |
| 82173494     | Granted   | 1528469       | 10/18/2004  | 12/10/2008 | 4105131.9          | GB | Tape Drive Permanent Emulation Of Cd--drive For Disaster Recovery                                                                                                                                                                   |
| 82185167     | Granted   | 2413689       | 5/3/2005    | 1/31/2007  | 508968.5           | GB | Magnetic Tape Data Transfer Apparatus For Use With Different Width Magnetic Tapes                                                                                                                                                   |
| 82190411     | Granted   | 1587106       | 3/17/2005   | 6/18/2008  | 5102120.2          | GB | Use Of Write Pass Value To Enable Detection Of Tampering With WORM Data                                                                                                                                                             |
| 83261203     | Granted   | 913823        | 10/30/1998  | 5/22/2013  | 98308892.3         | GB | Data encoding method and apparatus                                                                                                                                                                                                  |
| 81991754     | Granted   | 2374042       | 1/31/2002   | 8/17/2005  | 202321.6           | GB | Harvest Data From A Networked Appliance                                                                                                                                                                                             |
| 82055123     | Granted   | 2358264       | 8/31/2000   | 5/12/2004  | 21417.1            | GB | Authoring Tool For Bayesian-Network Troubleshooters                                                                                                                                                                                 |
| 82071047     | Granted   | 1265144       | 6/8/2001    | 3/29/2006  | 1410070.5          | GB | A Method Of Providing Access To Computer Configuration Information To An Interested Party, An Arrangement Apparatus For Providing Remote Support To A Computer User, And Apparatus For Obtaining Remote Support For A Computer User |
| 82192784     | Granted   | 2425377       | 4/10/2006   | 40408      | 607149.2           | GB | External State Cache For Computer Processor                                                                                                                                                                                         |
| 83159858     | Published |               | 9/15/2010   |            | 1302670.3          | GB | COMPUTER SYSTEM WITH FABRIC MODULES                                                                                                                                                                                                 |
| 83618374     | Published |               | 5/25/2011   |            | 1315512.2          | GB | BLADE COMPUTER SYSTEM                                                                                                                                                                                                               |
| 83787628     | Granted   | 2460074       | 7/31/2009   | 12/31/2014 | 9847921.5          | GB | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                                                                                                                                  |
| 82102322     | Granted   | 1413893       | 10/17/2003  | 38623      | 3256580.6          | GB | System And Method Of Measuring Low Impedances                                                                                                                                                                                       |
| 83092490     | Published |               | 6/18/2010   |            | 1221862.4          | GB | Systems And Methods For Determining Electrical Connectivity                                                                                                                                                                         |
| 81993626     | Granted   | 2386268       | 11/1/2002   | 9/28/2005  | 225511.5           | GB | Battery Charging And Discharging System Optimized For High Temperature Environments                                                                                                                                                 |
| 82025405     | Granted   | 907123        | 3/26/1998   | 5/26/2004  | 98105536.1         | GB | System And Method For Reporting Available Capacity In A Data Storage System With Variable Consumption Characteristics                                                                                                               |
| 82126979     | Granted   | 851362        | 12/31/1997  | 4/23/2003  | 97310692.5         | GB | BUFFER RESERVATION METHOD FOR A BUS BRIDGE SYSTEM                                                                                                                                                                                   |
| 82232807     | Granted   | 2464074       | 5/27/2008   | 12/28/2011 | 1002400.8          | GB | Systems And Methods For Improving Performance Of A Routable Fabric                                                                                                                                                                  |
| 82857872     | Granted   | GB2480986     | 4/28/2009   | 4/8/2015   | 1117526.2          | GB | Network Interface                                                                                                                                                                                                                   |
| 83538878     | Granted   | 2255263       | 2/20/2008   | 7/31/2013  | 8730240.2          | GB | Redriver With Two Reference Clocks And Method Of Operation Thereof                                                                                                                                                                  |

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| 82066862     | Granted   | 815677        | 1/17/1997   | 3/16/2005  | 97900685.5         | GB | Multicarrier Communication System And Method For Peer Power Control                                     |
| 82277066     | Granted   | 2393531       | 9/24/2002   | 5/10/2006  | 222232.1           | GB | Multimodal Interaction Across Multiple Devices                                                          |
| 82037954     | Granted   | 1014622       | 12/20/1999  | 8/3/2005   | 99310273           | GB | Network Appliance Combining Asynchronous Notification With Interactive Network Transfer Protocol Server |
| 82269518     | Granted   | 1159815       | 3/15/2000   | 11/23/2005 | 914989.9           | GB | METHOD AND SYSTEM FOR DISTRIBUTED NETWORK ADDRESS TRANSLATION WITH NETWORK SECURITY FEATURES            |
| 83242872     | Granted   | EP2077029     | 9/18/2007   | 41395      | 7842678            | GB | IDENTIFYING A SUBNET ADDRESS RANGE FROM DNS INFORMATION                                                 |
| 84084095     | Published |               | 4/26/2012   |            | 1419017.7          | GB | MULTICAST ROUTER TOPOLOGY DISCOVERY                                                                     |
| 82251218     | Granted   | 2472072       | 7/24/2009   | 10/16/2013 | 912846.3           | GB | Deduplication Of Encoded Data                                                                           |
| 81956231     | Granted   | 2048314       | 6/21/1995   | 8/23/1995  | 2048314            | GB | Media Autochanger Such As An Optical Disk Autochanger                                                   |
| 82006862     | Granted   | 1439745       | 7/23/2003   | 5/9/2007   | 3016822.3          | GB | Backplane System And Method For Its Use                                                                 |
| 82012853     | Granted   | 757351        | 6/10/1996   | 8/16/2001  | 96109263.2         | GB | Computer Frame Structure With Modular Housing                                                           |
| 82028276     | Granted   | 940805        | 3/2/1999    | 6/18/2008  | 99301567.6         | GB | Servo Band Identification In Linear Tape Systems Having Timing-based Servo Formats                      |
| 82049630     | Granted   | 2350535       | 3/2/2000    | 11/5/2003  | 5100.3             | GB | Firm Addressing For Devices On A Fibre Channel Arbitrated Loop                                          |
| 82063862     | Granted   | 2375651       | 4/11/2002   | 10/12/2005 | 208326.9           | GB | Data Authentication                                                                                     |
| 82068485     | Granted   | 945800        | 3/2/1998    | 7/16/2003  | 98301498.6         | GB | Enhancing Reliability                                                                                   |
| 84067467     | Granted   | 2324440       | 8/7/2008    | 10/8/2014  | 8797322.8          | GB | Providing Data Structures For Determining Whether Keys Of An Index Are Present In A Storage System      |
| 83873536     | Granted   | 2249542       | 4/8/2010    | 4/2/2014   | 10159409.1         | GB | Communicating Confidential Information Between An Application And A Database                            |
| 84119243     | Granted   | 1748621       | 7/5/2006    | 12/31/2014 | 6253519            | GB | Computer System Polling                                                                                 |
| 81957104     | Granted   | 750254        | 6/11/1996   | 5/8/2002   | 96109347.3         | GB | Method And Apparatus For Providing Topology Based Enterprise Management Services                        |
| 81985139     | Granted   | 2377121       | 4/9/2002    | 10/19/2005 | 208166.9           | GB | Method And System For Identifying Event Source In Duplicate IP Networks                                 |
| 82098764     | Granted   | 2397913       | 1/12/2004   | 9/14/2005  | 400589.8           | GB | Collection Of Session-Related Information Using An Extendable Sampling Period                           |
| 82177112     | Granted   | 2410648       | 1/14/2005   | 9/13/2006  | 500808.1           | GB | Managing A Network                                                                                      |
| 82277315     | Granted   | 2400771       | 3/24/2004   | 6/28/2006  | 406523.1           | GB | Use Of Nodes To Monitor Or Manage Peer To Peer Networks                                                 |
| 82089959     | Granted   | 2400697       | 3/29/2004   | 12/7/2005  | 407050.4           | GB | Method Of Creating A Unit Test Framework To Test A Resource Description Framework Based Object          |
| 82062737     | Granted   | 2368227       | 10/17/2000  | 12/10/2003 | 25461.5            | GB | Contact Center                                                                                          |
| 82062866     | Granted   | 1215656       | 11/30/2001  | 6/15/2005  | 1310044.1          | GB | Idiom Handling In Voice Service Systems                                                                 |

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| 82133603     | Granted   | 1188339       | 6/23/2000   | 11/24/2004 | 943160.2           | GB | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS                        |
| 82171685     | Granted   | 2410395       | 1/12/2005   | 7/26/2006  | 500576.4           | GB | Signal Gateway Aggregation                                                                                                     |
| 82197659     | Granted   | 1643777       | 10/4/2004   | 6/17/2009  | 4300652.7          | GB | Methods And Apparatus For Controlling Signalling Gateways                                                                      |
| 82215134     | Granted   | 1892907       | 7/31/2006   | 4/22/2009  | 6300840.3          | GB | Signalling Gateway                                                                                                             |
| 82654154     | Granted   | 1941701       | 7/20/2006   | 6/22/2011  | 6787972.6          | GB | Telephony And Web Services Coordination                                                                                        |
| 84109797     | Granted   | 1784962       | 7/26/2005   | 4/8/2015   | 5775235.4          | GB | System, Method, And Computer Program Product For Content Delivery In A Push-to-talk Communication System                       |
| 84118596     | Granted   | 2277311       | 5/20/2009   | 2/25/2015  | 9751488.9          | GB | Apparatus And Method For Recording Video Data                                                                                  |
| 81971777     | Granted   | 2373673       | 12/20/2001  | 7/28/2004  | 130569.7           | GB | Apparatus And Method For Identifying A Requested Level Of Service For A Transaction                                            |
| 82204088     | Granted   | 2431848       | 10/24/2006  | 6/8/2011   | 621178.3           | GB | System, Device, Method And Utility To Convert Images Retrieved From A Device To A Format Supported By A Device Management Tool |
| 82204520     | Granted   | 2425864       | 4/11/2006   | 8/5/2009   | 607241.7           | GB | System And Methods For Organizing And Storing Data                                                                             |
| 82093079     | Granted   | 2398407       | 1/16/2004   | 11/16/2005 | 401001.3           | GB | Radio Frequency Linked Computer Architecture                                                                                   |
| 82100264     | Granted   | 2406677       | 10/1/2004   | 6/6/2007   | 421879.8           | GB | A Rack Equipment Management System And Method                                                                                  |
| 82256276     | Granted   | 1745661       | 4/21/2005   | 9/1/2010   | 5737577.6          | GB | INTERNET MICRO CELL                                                                                                            |
| 83800549     | Granted   | 2031822       | 12/12/2002  | 2/12/2014  | 8017098.8          | GB | System And Method For Managing Wireless Vehicular Communications                                                               |
| 82254284     | Granted   | 1504376       | 5/7/2003    | 1/13/2010  | 3726681.4          | GB | Data Archive Recovery                                                                                                          |
| 83189530     | Granted   | 1457007       | 12/17/2002  | 2/13/2013  | 2790678.3          | GB | System For Supply Chain Management Of Virtual Private Network Services                                                         |
| 81978773     | Granted   | 1244104       | 3/22/2002   | 5/16/2007  | 2252102.5          | GB | Inventory Control Apparatus And Method For A Data Storage System                                                               |
| 82743457     | Granted   | 1236206       | 7/10/2000   | 9/13/2006  | 947182.2           | GB | Electrically Addressable Volatile Non-volatile Molecular-based Switching Devices                                               |
| 83253503     | Granted   | 2361438       | 10/29/2008  | 5/15/2013  | 8877855            | GB | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein                                        |
| 84103242     | Published |               | 7/31/2012   |            | 1420560.3          | GB | BANDWIDTH GUARANTEE AND WORK CONSERVATION                                                                                      |
| 83087123     | Granted   | 2047319       | 7/11/2007   | 11/7/2012  | 7796825.3          | GB | Compact Systems For Generating Polarization-entangled Photons                                                                  |
| 84038207     | Granted   | 2386150       | 1/9/2009    | 41899      | 9837743.5          | GB | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                      |
| 82672116     | Granted   | 1540502       | 8/11/2003   | 3/2/2011   | 3785167.2          | GB | Multi-level packet screening with dynamically selected filtering criteria                                                      |
| 82802870     | Granted   | 1411703       | 10/11/2003  | 8/3/2011   | 3256431.2          | GB | Propagation Of Viruses Through An Information Technology Network                                                               |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 82233113     | Granted     | 2464221       | 5/21/2008   | 9/28/2011  | 922042.7 GB        | GB | Dynamic Converter Control For Efficient Operation                                                                                                   |
| 82062992     | Granted     | 2382699       | 10/18/2002  | 2/1/2006   | 224252.7 GB        | GB | Dynamic Generation Of A Networked Information Resource                                                                                              |
| 83087146     | Granted     | 2215539       | 11/27/2007  | 1/2/2013   | 7871581 GB         | GB | SYSTEM SYNTHESIS TO MEET AN ENERGY LOSS TARGET VALUE                                                                                                |
| 84210538     | Granted     | EP1909178     | 6/6/2007    | 4/8/2015   | 7252277.4 GB       | GB | Transactional Shared Memory System And Method Of Control                                                                                            |
| 82088648     | Granted     | 2393540       | 7/25/2003   | 10/26/2005 | 317525.4 GB        | GB | System, Method And Apparatus For The Frequency Management Of Blades In A Bladed Architecture Based On Performance Requirements                      |
| 82103699     | Granted     | 2403610       | 6/30/2004   | 6/28/2006  | 414700.5 GB        | GB | Apparatus And Method For Real-time Power Distribution Management                                                                                    |
| 82191974     | Granted     | 2422727       | 1/18/2006   | 8/19/2009  | 601024.3 GB        | GB | Reversible Fan Of Electronic Module                                                                                                                 |
| 82194662     | Granted     | 2431777       | 9/25/2006   | 4/6/2011   | 618993.2 GB        | GB | Impingement Cooling Of Components In An Electronic System                                                                                           |
| 82938281     | Granted     | 2485096       | 3/22/2010   | 3/12/2014  | 1202063.2 GB       | GB | MODULAR DATA CENTER                                                                                                                                 |
| 83629031     | Granted     | 2506764       | 6/27/2011   | 9/23/2015  | 1318783.6 GB       | GB | COOLING A SECONDARY COMPONENT BY DIVERTING AIRFLOW USING AN AIR CHANNEL ASSOCIATED WITH A THERMAL DISSIPATION DEVICE THAT COOLS A PRIMARY COMPONENT |
| 82066850     | Granted     | 1001643       | 1/17/1996   | 2/9/2001   | 98100615.8 HK      | HK | OEDM FEC                                                                                                                                            |
| 82207307     | Granted     | 1129471       | 8/1/2007    | 6/8/2012   | 9109040.2 HK       | HK | Cooling Fan Module                                                                                                                                  |
| 82579389     | Granted     | 1129758       | 9/28/2009   | 4/5/2013   | 9108915.6 HK       | HK | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security                                    |
| 82948588     | Published   |               | 10/2/2006   |            | 9104467.7 HK       | HK | RETRO-FITTING SYNTHETIC FULL COPIES OF DATA                                                                                                         |
| 82579545     | Application |               | 12/28/2007  |            | 101011708 HK       | HK | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security                                                       |
| 82579353     | Published   |               | 1/20/2009   |            | 9100576.3 HK       | HK | Merging Multi-Line Log Entries                                                                                                                      |
| 82579370     | Published   |               | 9/25/2009   |            | 9108891.4 HK       | HK | Tracking Changing State Data To Assist In Computer Network Security                                                                                 |
| 82948595     | Published   |               | 10/2/2006   |            | 9104468.6 HK       | HK | DYNAMIC BULK-TO-BRICK TRANSFORMATION OF DATA                                                                                                        |
| 82579301     | Granted     | 1096794       | 5/4/2005    | 40389      | 7104042.3 HK       | HK | Pattern Discovery In A Network Security System                                                                                                      |
| 82077326     | Granted     | 901672        | 4/24/1997   | 37937      | 97922458.1 IE      | IE | System, Method And Article Of Manufacture For Network Electronic Authorization Utilizing An Authorization Instrument                                |
| 82579297     | Granted     | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2 IE       | IE | Pattern Discovery In A Network Security System                                                                                                      |
| 82077371     | Granted     | 907935        | 4/24/1997   | 8/24/2005  | 97922456.5 IE      | IE | A System And Method For Secure Network Electronic Payment And Credit Collection                                                                     |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 82077482     | Granted     | 919048        | 6/17/1997   | 8/25/2004  | 9/933142.8 IE      | IE | A System, Method And Article Of Manufacture For Multi-Entry Point Virtual Point Of Sale Architecture                                             |
| 83185308     | Granted     | 1715488       | 12/17/1998  | 2/11/2009  | 6011296.8 IE       | IE | Tape Leader Pin Assembly And Method For Making The Same                                                                                          |
| 82251947     | Granted     | 140906        | 7/15/1999   | 4/16/2006  | 140906 IL          | IL | System and Method for Selectively Defining Access to Application Features                                                                        |
| 82579354     | Granted     | 194190        | 4/3/2007    | 7/31/2012  | 194190 IL          | IL | Merging Multi-Line Log Entries                                                                                                                   |
| 82948281     | Granted     | 125188        | 12/31/1996  | 10/1/2002  | 125188 IL          | IL | EVALUATION OF CONTENT OF A DATA SET USING MULTIPLE AND/OR COMPLEX QUERIES                                                                        |
| 82579302     | Granted     | 178861        | 5/4/2005    | 12/28/2011 | 178861 IL          | IL | Pattern Discovery In A Network Security System                                                                                                   |
| 82267781     | Granted     | 127055        | 11/16/1998  | 12/30/2004 | 127055 IL          | IL | A Method And Device For Generating A Frame Check Sequence                                                                                        |
| 82116887     | Granted     | 130239        | 12/8/1997   | 2/24/2004  | 130239 IL          | IL | PUBLIC KEY CRYPTOGRAPHIC APPARATUS AND METHOD                                                                                                    |
| 82095314     | Granted     | 252619        | 10/15/2004  | 5/24/2012  | 1215/CHENP/2006 IN | IN | TELECOMMUNICATION SERVICE PLATFORM AND METHOD THEREOF                                                                                            |
| 82097066     | Granted     | 263181        | 6/13/2005   | 10/13/2014 | 4556/CHENP/2006 IN | IN | Method And System For Establishing Communications                                                                                                |
| 82098419     | Application |               | 8/28/2007   |            | 637/CHENP/2009 IN  | IN | Computer System Indicator Panel With Exposed Indicator Edge                                                                                      |
| 82174151     | Granted     | 255977        | 4/28/2005   | 4/11/2013  | 4026/CHENP/2006 IN | IN | QUANTUM OPTICAL STATE CONVERTER                                                                                                                  |
| 82178216     | Application |               | 4/1/2005    |            | 265/KOL/2005 IN    | IN | Key-configured Topology With Connection Management                                                                                               |
| 82185476     | Application |               | 1/28/2005   |            | 45/KOL/05 IN       | IN | Providing A Flexible Protection Model In A Computer System By Decoupling Protection From Computer Privilege Level                                |
| 82186199     | Granted     | 258179        | 5/13/2005   | 41621      | 4080/CHENP/2006 IN | IN | METHOD AND APPARATUS FOR COMMUNICATING INFORMATION BETWEEN AN INTERMEDIATE ELEMENT AND A SOURCE ELEMENT IN A MESSAGE-BASED COMMUNICATIONS SYSTEM |
| 82188083     | Granted     | 265281        | 7/4/2005    | 42052      | 858/CHE/2005 IN    | IN | Time Of Day Response                                                                                                                             |
| 82188650     | Granted     | 258709        | 4/28/2005   | 1/31/2014  | 4028/CHENP/2006 IN | IN | Non-demolition Photon Detector That Preserves Input State Characteristics                                                                        |
| 82189262     | Granted     | 262409        | 7/4/2005    | 8/20/2014  | 857/CHE/2005 IN    | IN | METHOD FOR LATENT ERROR DETECTION                                                                                                                |
| 82189817     | Application |               | 1/18/2006   |            | 84/CHE/2006 IN     | IN | Method And Apparatus For Direct Reception Of Inbound Data                                                                                        |
| 82189835     | Application |               | 9/28/2005   |            | 1379/CHE/2005 IN   | IN | Systems And Methods For Presenting Managed Data                                                                                                  |
| 82192376     | Application |               | 3/24/2005   |            | 223/KOL/05 IN      | IN | Method And System Of Determining Whether A User Program Has Made A System Level Call                                                             |
| 82196324     | Application |               | 11/29/2005  |            | 3204/DEL/2005 IN   | IN | Diagnostic Memory Dumping                                                                                                                        |
| 82197398     | Application |               | 11/10/2005  |            | 3003/DEL/2005 IN   | IN | Distributed Lock                                                                                                                                 |
| 82199768     | Application |               | 7/3/2006    |            | 1151/CHE/2006 IN   | IN | Heterogeneous Parallel Processing Based On Processor Performance                                                                                 |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|----------------------------------------------------------------------------------------------------------------------------------------|
| 82203428     | Application |               | 4/25/2006   |            | 775/CHE/2006       | IN | Speedy Boot For Computer Systems                                                                                                       |
| 82205189     | Application |               | 1/30/2006   |            | 3638/CHENP/2008    | IN | Forms Management System                                                                                                                |
| 82205573     | Application |               | 3/17/2006   |            | 4242/CHENP/2007    | IN | Message Exchange Between Software Components                                                                                           |
| 82206005     | Application |               | 2/13/2006   |            | 231/CHE/2006       | IN | Distributed-state-information-based Distributed Computing Systems And Methods And Protocols For Managing Distributed State Information |
| 82206314     | Application |               | 3/9/2006    |            | 3901/CHENP/2007    | IN | Embedded Web-based Management Method                                                                                                   |
| 82206566     | Application |               | 4/20/2006   |            | 721/CHE/2006       | IN | File Access Management System                                                                                                          |
| 82207136     | Application |               | 5/24/2006   |            | 908/CHE/2006       | IN | File Cache Management System                                                                                                           |
| 82212302     | Application |               | 10/20/2005  |            | 1515/CHE/2005      | IN | A Method And System For Establishing An Extranet And A Method For Selectively Controlling Traffic Flow Relative To A Firewall          |
| 82228421     | Published   |               | 10/30/2007  |            | 2470/CHE/2007      | IN | A Method And System For Clustering                                                                                                     |
| 82228730     | Application |               | 1/23/2008   |            | 3882/CHENP/2009    | IN | METHODS FOR PROVIDING SECURE Ecommerce TRANSACTIONS                                                                                    |
| 82230782     | Application |               | 4/17/2007   |            | 814/CHE/2007       | IN | Managing Of Items Distributed In A Global Supply Chain                                                                                 |
| 82233152     | Application |               | 2/20/2008   |            | 5058/CHENP/2010    | IN | Redriver With Two Reference Clocks And Method Of Operation Thereof                                                                     |
| 82235219     | Application |               | 6/27/2007   |            | 1380/CHE/2007      | IN | Access Control System And Method                                                                                                       |
| 82235768     | Application |               | 2/4/2008    |            | 298/CHE/2008       | IN | RFID System With A Mobile RFID Reader                                                                                                  |
| 82238168     | Application |               | 4/28/2008   |            | 6450/CHENP/2010    | IN | Adjustable Server-transmission Rates Over Fixed-speed Backplane Connections Within A Multi-server Enclosure                            |
| 82238276     | Application |               | 2/25/2008   |            | 466/CHE/2008       | IN | Data Processing System And Method                                                                                                      |
| 82239098     | Published   |               | 4/2/2008    |            | 5825/CHENP/2010    | IN | Disk Drive Data Encryption                                                                                                             |
| 82241084     | Application |               | 3/6/2008    |            | 570/CHE/2008       | IN | Port Enablement                                                                                                                        |
| 82241465     | Application |               | 4/2/2008    |            | 5943/CHENP/2010    | IN | Converting Resets In Shared I/O System                                                                                                 |
| 82241600     | Application |               | 4/28/2008   |            | 6822/CHENP/2010    | IN | Virtual-interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                                                         |
| 82242575     | Published   |               | 3/11/2008   |            | 6412/DELNP/2010    | IN | Optoelectronic Switches Using On-chip Optical Waveguides                                                                               |
| 82244591     | Application |               | 5/5/2008    |            | 1107/CHE/2008      | IN | Pre-pay Communication Services                                                                                                         |
| 82250078     | Application |               | 6/30/2009   |            | 1540/CHE/2009      | IN | Managing I/O Request In Storage System                                                                                                 |
| 82250651     | Published   |               | 7/13/2009   |            | 1654/CHE/2009      | IN | Method And System For Verifying Data Accuracy                                                                                          |
| 82254149     | Granted     | 241567        | 6/12/2003   | 40372      | 2536/CHENP/2004    | IN | Multi-tiered Enterprise Management System And Method Including A Presentation Services Unit External To The Enterprise                 |
| 82254248     | Granted     | 239566        | 9/9/2004    | 40261      | 410/MUMNP/2006     | IN | Extensible Agent System And Method                                                                                                     |
| 82254275     | Granted     | 246786        | 5/7/2003    | 3/16/2011  | 2190/CHENP/2004    | IN | System and Method for Data Archive Recovery                                                                                            |
| 82256198     | Granted     | 266818        | 6/15/2005   | 6/3/2015   | 00238/MUMNP/2007   | IN | Virtual User Interface For Multiple User Devices                                                                                       |

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| 82256267     | Granted     | 256932        | 4/21/2005   | 8/14/2013  | 1393/INUMNP/2006   | IN | SYSTEM AND METHOD FOR FACILITATING COMMUNICATIONS BETWEEN DEVICES IN A COMMUNICATIONS NETWORK |
| 82256321     | Application |               | 9/6/2006    |            | 00100/INUMNP/2008  | IN | SYSTEMS AND METHODS FOR THE PROVISION OF DATA PROCESSING SERVICES TO MULTIPLE ENTITIES        |
| 82256885     | Application |               | 5/11/2006   |            | 2165/INUMNP/2007   | IN | AUTOMATED REPORTING OF COMPUTER SYSTEM METRICS                                                |
| 82257755     | Application |               | 7/21/2009   |            | 6084/CHENP/2010    | IN | System And Method For Electronic Data Security                                                |
| 82260689     | Published   |               | 3/3/2010    |            | 555/CHE/2010       | IN | Method For Determining Network Topology                                                       |
| 82262432     | Published   |               | 4/30/2010   |            | 1210/CHE/2010      | IN | MANAGING EXCLUSIVE ACCESS TO SYSTEM RESOURCES                                                 |
| 82262441     | Published   |               | 6/23/2010   |            | 1773/CHE/2010      | IN | Testing Compatibility Of A Computer Application                                               |
| 82274807     | Application |               | 12/18/2006  |            | 2701/DEL/2006      | IN | Bi-planar Network Architecture                                                                |
| 82274855     | Application |               | 11/28/2007  |            | 2477/DEL/2007      | IN | Network Traffic Redirection In Bi-Planar Networks                                             |
| 82400884     | Application |               | 6/19/2008   |            | 8318/CHENP/2010    | IN | Multi-blade Interconnector                                                                    |
| 82405524     | Application |               | 5/28/2008   |            | 7840/CHENP/2010    | IN | Impedance Correction                                                                          |
| 82554399     | Application |               | 6/20/2008   |            | 7590/CHENP/2010    | IN | LOW LEVEL INITIALIZER                                                                         |
| 82554428     | Application |               | 6/20/2008   |            | 7591/CHENP/2010    | IN | DOMAIN MANAGEMENT PROCESSOR                                                                   |
| 82559518     | Application |               | 6/1/2008    |            | 8093/CHENP/2010    | IN | Queue Sharing And Reconfiguration In PCI Express Links                                        |
| 82576592     | Application |               | 7/1/2008    |            | 7997/CHENP/2010    | IN | Remote Computing Services                                                                     |
| 82578994     | Application |               | 6/13/2008   |            | 8059/CHENP/2010    | IN | Hierarchical Policy Management                                                                |
| 82580857     | Published   |               | 12/30/2008  |            | 10776/DELNP/2008   | IN | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                            |
| 82585365     | Application |               | 8/4/2009    |            | 81/CHENP/2011      | IN | APPARATUS, AND ASSOCIATED METHOD, FOR TRACKING AIRCRAFT STATUS                                |
| 82651134     | Application |               | 9/23/2009   |            | 1050/CHENP/2011    | IN | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                                    |
| 82656088     | Application |               | 10/28/2008  |            | 2596/CHENP/2011    | IN | WORKFORCE PLANNING                                                                            |
| 82656100     | Application |               | 10/30/2008  |            | 2628/CHENP/2011    | IN | Supply And Demand Consolidation In Employee Resource Planning                                 |
| 82665389     | Application |               | 3/8/2011    |            | 1694/DELNP/2011    | IN | Telecommunication Systems                                                                     |
| 82716521     | Application |               | 10/30/2008  |            | 2645/CHENP/2011    | IN | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                          |
| 82743442     | Application |               | 5/17/2011   |            | 1676/CHE/2011      | IN | DETERMINING POWER SOURCING EQUIPMENT WITH EXCESS POWER CAPACITY                               |
| 82744690     | Application |               | 1/12/2009   |            | 4375/CHENP/2011    | IN | Reducing Propagation Of Message Floods In Computer Networks                                   |
| 82766418     | Application |               | 1/19/2009   |            | 4292/CHENP/2011    | IN | Load Balancing                                                                                |
| 82780880     | Application |               | 6/29/2011   |            | 2206/CHE/2011      | IN | PROVIDE SERVICES USING UNIFIED COMMUNICATION CONTENT                                          |
| 82805179     | Application |               | 1/26/2010   |            | 5378/CHENP/2011    | IN | Communications System And Method                                                              |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 82813909     | Application |               | 1/29/2009   |            | 5728/CHENP/2011    | IN | CONNECTING PORTS OF ONE OR MORE ELECTRONIC DEVICES TO DIFFERENT SUBSETS OF NETWORKS BASED ON DIFFERENT OPERATING MODES                              |
| 82817465     | Application |               | 3/13/2009   |            | 5806/CHENP/2011    | IN | A PLURALITY OF SENSORS COUPLED TO A SERIES OF SWITCHING DEVICES                                                                                     |
| 82817499     | Application |               | 2/24/2009   |            | 5808/CHENP/2011    | IN | Method And System To Lower Power Consumption                                                                                                        |
| 82840836     | Application |               | 3/13/2009   |            | 7158/DELNP/2011    | IN | Determining Status Assignments That Optimize Entity Utilization And Resource Power Consumption                                                      |
| 82879821     | Application |               | 10/26/2009  |            | 9070/CHENP/2011    | IN | METHOD AND APPARATUS FOR INCREASING THE SPEED OF SUCCESSFUL ENTANGLEMENT                                                                            |
| 82882084     | Application |               | 10/28/2011  |            | 3708/CHE/2011      | IN | CREATION AND QUANTUM REPEATER USING THE SAME SYSTEMS AND METHODS FOR CALL FORWARDING TO A DEVICE BASED ON A PRIORITY LEVEL AND GEOGRAPHIC PROXIMITY |
| 82948576     | Published   |               | 8/7/2006    |            | 1703/DELNP/2008    | IN | ENTERPRISE SERVER VERSION MIGRATION THROUGH IDENTITY PRESERVATION                                                                                   |
| 82948594     | Published   |               | 10/2/2006   |            | 948/DELNP/2009     | IN | DYNAMIC BULK-TO-BRICK TRANSFORMATION OF DATA                                                                                                        |
| 82987735     | Application |               | 4/2/2012    |            | 1313/CHE/2012      | IN | MANAGING VIRTUAL MACHINES IN A CLOUD COMPUTING SYSTEM                                                                                               |
| 82992893     | Application |               | 4/12/2012   |            | 1485/CHE/2012      | IN | Automatic Detection Of An End Node Behind A Phone On A Computer Network                                                                             |
| 83068499     | Application |               | 7/30/2012   |            | 3116/CHE/2012      | IN | Source Discovery For Non-Flooding Multicast Using Openflow                                                                                          |
| 83080896     | Application |               | 7/31/2012   |            | 3142/CHE/2012      | IN | SYSTEM AND METHOD FOR REAL-TIME DETECTION, IDENTIFICATION AND REPORTING OF MAC-SYNC FAILURES IN DISTRIBUTED TRUNKING                                |
| 83098374     | Application |               | 12/11/2012  |            | 5166/CHE/2012      | IN | Identifying A Label-Switched Path (LSP) Associated With A Multi Protocol Label Switching (MPLS) Service And Diagnosing A LSP Related Fault          |
| 83099287     | Application |               | 1/16/2013   |            | 221/CHE/2013       | IN | Securing Confidential Information In A Document                                                                                                     |
| 83116812     | Application |               | 9/27/2012   |            | 4026/CHE/2012      | IN | Dynamic Management Of A Cloud Computing Infrastructure                                                                                              |
| 83116829     | Application |               | 9/28/2012   |            | 4038/CHE/2012      | IN | QR CODE UTILIZATION IN SELF-REGISTRATION IN A NETWORK                                                                                               |
| 83139039     | Application |               | 3/28/2013   |            | 1394/CHE/2013      | IN | Network Switch Configuration                                                                                                                        |
| 83165232     | Application |               | 7/22/2010   |            | 326/CHENP/2013     | IN | Context-based Item Bookmarking                                                                                                                      |
| 83209025     | Application |               | 3/15/2013   |            | 770/DEL/2013       | IN | DATA LOOP DETECTION                                                                                                                                 |
| 83209040     | Application |               | 3/15/2013   |            | 772/DEL/2013       | IN | CERTIFICATE GRANT LIST AT NETWORK DEVICE                                                                                                            |
| 83417895     | Application |               | 1/24/2011   |            | 6186/DELNP/2013    | IN | A SYSTEM AND METHOD FOR ACCESSING A SERVICE                                                                                                         |
| 83777448     | Application |               | 12/21/2013  |            | 5971/CHE/2013      | IN | NETWORK PROGRAMMING                                                                                                                                 |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------|
| 83862623     | Application |               | 3/20/2014   |            | 1499/CHE/2014      | IN | NETWORK OPERATION RULE                                                                                                      |
| 83942838     | Application |               | 4/29/2014   |            | 2175/CHE/2014      | IN | SECURING DATA IN A FILE SYSTEM                                                                                              |
| 83942889     | Application |               | 4/29/2014   |            | 2173/CHE/2014      | IN | MAINTAINING FILES IN A RETAINED FILE SYSTEM                                                                                 |
| 83955951     | Application |               | 5/22/2014   |            | 2541/CHE/2014      | IN | Eliminating File Duplication In A File System                                                                               |
| 83955956     | Application |               | 9/1/2014    |            | 4259/CHE/2014      | IN | DYNAMICALLY APPLYING A PATCH TO A SHARED LIBRARY                                                                            |
| 83956059     | Application |               | 6/18/2014   |            | 2973/CHE/2014      | IN | PREVENTING FLOW TABLE MISSES IN A SOFTWARE DEFINED NETWORK                                                                  |
| 83957616     | Application |               | 7/30/2014   |            | 3722/CHE/2014      | IN | FILE DIRECTORY STORAGE ON A STORAGE DEVICE                                                                                  |
| 83958175     | Application |               | 9/26/2014   |            | 4752/CHE/2014      | IN | DETERMINING TEST APPLICATION EFFECTIVENESS                                                                                  |
| 83958358     | Application |               | 6/2/2014    |            | 2704/CHE/2014      | IN | Journal Events In A File System And A Database                                                                              |
| 83958773     | Application |               | 7/30/2014   |            | 3723/CHE/2014      | IN | DISTRIBUTED SEGMENTED FILE SYSTEMS                                                                                          |
| 83958831     | Application |               | 7/31/2014   |            | 3765/CHE/2014      | IN | FILE CREATION                                                                                                               |
| 83961764     | Application |               | 6/10/2014   |            | 2835/CHE/2014      | IN | SERVICE LEVEL BASED CATEGORIZATION OF VIRTUAL MACHINES                                                                      |
| 83975681     | Application |               | 6/26/2014   |            | 3126/CHE/2014      | IN | BACKUP AND NON-STAGED RECOVERY OF VIRTUAL ENVIRONMENTS                                                                      |
| 83975708     | Application |               | 6/26/2014   |            | 3125/CHE/2014      | IN | VIRTUAL MACHINE DATA PROTECTION                                                                                             |
| 83991660     | Application |               | 4/30/2012   |            | 5391/CHE/2014      | IN | AUTOMATED EVENT MANAGEMENT                                                                                                  |
| 84033185     | Application |               | 12/12/2014  |            | 6287/CHE/2014      | IN | CLOUD SERVICE TUNING                                                                                                        |
| 84033423     | Application |               | 11/1/2014   |            | 5484/CHE/2014      | IN | MANAGING A STORAGE POOL                                                                                                     |
| 84034616     | Application |               | 10/29/2014  |            | 5401/CHE/2014      | IN | DATA RESTORATION USING ALLOCATION MAPS                                                                                      |
| 84034620     | Application |               | 11/4/2014   |            | 5529/CHE/2014      | IN | Storing excess data in a RAID 60 array                                                                                      |
| 84034628     | Application |               | 1/20/2015   |            | 294/CHE/2015       | IN | Database Management                                                                                                         |
| 84034637     | Application |               | 11/26/2014  |            | 5932/CHE/2014      | IN | Secure File Deletion                                                                                                        |
| 84034659     | Application |               | 11/26/2014  |            | 5934/CHE/2014      | IN | BACKUP OPERATIONS                                                                                                           |
| 84054897     | Application |               | 11/1/2014   |            | 5486/CHE/2014      | IN | EXTENDED ATTRIBUTE STORAGE                                                                                                  |
| 84054954     | Application |               | 11/1/2014   |            | 5483/CHE/2014      | IN | DYNAMICALLY UPDATING METADATA                                                                                               |
| 84054960     | Application |               | 11/4/2014   |            | 5519/CHE/2014      | IN | GENERATING A UNIQUE IDENTIFIER FOR AN OBJECT IN A DISTRIBUTED FILE SYSTEM                                                   |
| 84055249     | Application |               | 11/1/2014   |            | 5482/CHE/2014      | IN | FILE SYSTEM CONFIGURATION DATA STORAGE                                                                                      |
| 84055289     | Application |               | 11/3/2014   |            | 5500/CHE/2014      | IN | DETECTING INCONSISTENCIES IN HIERARCHICAL ORGANIZATION DIRECTORIES                                                          |
| 84077708     | Application |               | 6/8/2012    |            | 7500/CHE/2014      | IN | CHECKPOINTING USING FPGA                                                                                                    |
| 84104747     | Application |               | 8/17/2012   |            | 8248/CHE/2014      | IN | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY |
| 84111577     | Application |               | 1/30/2015   |            | 460/CHE/2015       | IN | JOB SCHEDULING IN AN INFINIBAND NETWORK BASED HPC CLUSTER                                                                   |
| 84112816     | Application |               | 1/30/2015   |            | 465/CHE/2015       | IN | BYTE ADDRESSABLE NON-VOLATILE RANDOM ACCESS MEMORY FOR STORING LOG RECORD                                                   |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------|
| 84113775     | Application |               | 4/10/2015   |            | 1897/CHE/2015      | IN | INTEROPERABILITY-AS-A-SERVICE IN A CLOUD ENVIRONMENT                                    |
| 84113993     | Application |               | 1/30/2015   |            | 477/CHE/2015       | IN | FAILURE ATOMIC UPDATE OF APPLICATION DATA FILES                                         |
| 84114132     | Application |               | 2/13/2015   |            | 719/CHE/2015       | IN | CONSISTENCY CHECK ON NAMESPACE OF AN ONLINE FILE SYSTEM                                 |
| 84114147     | Application |               | 2/26/2015   |            | 930/CHE/2015       | IN | File Level Snapshots In A File System                                                   |
| 84114159     | Application |               | 1/29/2015   |            | 423/CHE/2015       | IN | CHARGING A USER'S STORAGE QUOTA FOR EXTENDED ATTRIBUTES                                 |
| 84114533     | Application |               | 3/9/2015    |            | 1150/CHE/2015      | IN | A-GPS WLAN                                                                              |
| 84114828     | Application |               | 1/29/2015   |            | 430/CHE/2015       | IN | FILE SERVICE OPERATION ON EXTERNAL HOST                                                 |
| 84116042     | Application |               | 3/30/2015   |            | 1662/CHE/2015      | IN | Scalable Cloud Storage Solution                                                         |
| 84118211     | Application |               | 1/28/2015   |            | 401/CHE/2015       | IN | BLOCK CIPHER                                                                            |
| 84137069     | Application |               | 1/30/2015   |            | 482/CHE/2015       | IN | MULTI-CHASSIS LINK AGGREGATION (LAG) SWITCHES                                           |
| 84138231     | Application |               | 3/13/2015   |            | 1254/CHE/2015      | IN | Restoring a flow path in response to a link failure in a software defined network (SDN) |
| 84141251     | Application |               | 7/31/2012   |            | 306/CHE/2015       | IN | NETWORK TRAFFIC PROCESSING SYSTEM                                                       |
| 84148405     | Application |               | 1/29/2015   |            | 427/CHE/2015       | IN | TAP TECHNOLOGY SELECTION                                                                |
| 84148410     | Application |               | 1/29/2015   |            | 428/CHE/2015       | IN | PACKET HEADERS WITH DEVICE-EXTRINSIC INFORMATION                                        |
| 84151047     | Application |               | 1/31/2015   |            | 491/CHE/2015       | IN | DEACTIVATING A NETWORK LINK AT A HOME LOCATION REGISTER (HLR) BASED ON A RESOURCE       |
| 84156691     | Application |               | 1/30/2015   |            | 487/CHE/2015       | IN | VIRTUAL MACHINE DATA PROTECTION                                                         |
| 84170183     | Application |               | 4/29/2015   |            | 2200/CHE/2015      | IN | MERGING INCOMING DATA IN A DATABASE                                                     |
| 84170289     | Application |               | 5/8/2015    |            | 2358/CHE/2015      | IN | HETEROGENEOUS HOT SPARE SERVER POOL                                                     |
| 84170417     | Application |               | 7/29/2015   |            | 3899/CHE/2015      | IN | FILE SYSTEM METADATA REPRESENTATIONS                                                    |
| 84171347     | Application |               | 4/29/2015   |            | 2201/CHE/2015      | IN | Failure of Network Devices in Cloud Managed Networks                                    |
| 84171405     | Application |               | 4/29/2015   |            | 2189/CHE/2015      | IN | NETWORK BASED SERVICE DISCOVERY VIA UNICAST MESSAGES                                    |
| 84171548     | Application |               | 4/30/2015   |            | 2242/CHE/2015      | IN | Reducing flooding of route updates of a dynamic routing protocol                        |
| 84172553     | Application |               | 5/29/2015   |            | 2706/CHE/2015      | IN | Generating Test Data Based on Histogram Statistics                                      |
| 84172736     | Application |               | 4/23/2015   |            | 2094/CHE/2015      | IN | Storage Reclamation in a Thin Provisioned Storage Device                                |
| 84173603     | Application |               | 6/9/2015    |            | 2885/CHE/2015      | IN | DATA REPLICATION MANAGEMENT                                                             |
| 84182208     | Application |               | 9/28/2012   |            | 1353/CHE/2015      | IN | Application Security Testing                                                            |
| 84195031     | Application |               | 3/13/2015   |            | 1250/CHE/2015      | IN | FILE MANAGEMENT                                                                         |
| 84202617     | Application |               | 3/26/2015   |            | 1571/CHE/2015      | IN | DELAY OF ROUTE UPDATE COMMUNICATION                                                     |
| 84203046     | Application |               | 4/15/2015   |            | 1947/CHE/2015      | IN | DATABASE QUERY CLASSIFICATION                                                           |
| 84217877     | Application |               | 4/8/2015    |            | 1853/CHE/2015      | IN | BIG DATA TRANSFER                                                                       |
| 84229486     | Application |               | 5/2/2015    |            | 2256/CHE/2015      | IN | Storage Memory Direct Access                                                            |
| 84260046     | Application |               | 7/6/2015    |            | 3446/CHE/2015      | IN | DATA MANAGEMENT USING INDEX CHANGE EVENTS                                               |
| 84262579     | To Be Filed |               |             |            |                    | IN | DATA BLOCK SNAPSHOTS                                                                    |

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|--------------|--------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------------------|
| 84262599     | Application  |               | 6/12/2015   |            | 2966/CHE/2015      | IN | Data Replication                                                                                                                   |
| 84262631     | Application  |               | 41304       |            | 3888/CHENP/2015    | IN | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM                                     |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 84262651     | Application  |               | 8/21/2015   |            | 4403/CHE/2015      | IN | REBUILDING STORAGE VOLUMES                                                                                                         |
| 84262694     | To Be Filed  |               |             |            |                    | IN | Method to recover Filesystem Archive Journal Audit Records                                                                         |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 84262880     | Application  |               | 6/24/2015   |            | 3171/CHE/2015      | IN | CONTROLLING APPLICATION DEPLOYMENT BASED ON LIFECYCLE STAGE                                                                        |
| 84262954     | Application  |               | 42237       |            | 4382/CHE/2015      | IN | ADDRESS RESOLUTION FOR ROUTING                                                                                                     |
| 84263074     | Application  |               | 7/15/2015   |            | 3633/CHE/2015      | IN | BACKUP DATA STORAGE                                                                                                                |
| 84263078     | Application  |               | 7/13/2015   |            | 3570/CHE/2015      | IN | BACKUP-CLIENT INTERFACE DEVICE                                                                                                     |
| 84263590     | Acknowledged |               |             |            |                    | IN | Rapid Resilience Pro - Sense and respond to supply chain events in real-time                                                       |
| 84264031     | Application  |               | 8/5/2015    |            | 4063/CHE/2015      | IN | SWITCHING FREQUENCY BAND OF RADIO OF ACCESS POINT                                                                                  |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 84264074     | Application  |               | 42214       |            | 3898/CHE/2015      | IN | Facilitating and Simplifying System Call Concurrency and Cache Coherency Tests in Distributed Systems.                             |
| 84264091     | Application  |               | 9/11/2015   |            | 4843/CHE/2015      | IN | Reducing Adjacency Losses In A Network                                                                                             |
| 84264119     | Application  |               | 6/30/2015   |            | 3342/CHE/2015      | IN | OPEN SHORTEST PATH FIRST ROUTING FOR HETEROGENEOUS NETWORKS                                                                        |
| 84265141     | Application  |               | 5/29/2015   |            | 2714/CHE/2015      | IN | APPLICATION DEPLOYMENT TO VIRTUAL MACHINES                                                                                         |
| 84273858     | Application  |               | 7/3/2015    |            | 3423/CHE/2015      | IN | PROCESSING IO REQUESTS IN MULTI-CONTROLLER STORAGE SYSTEMS                                                                         |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 84291301     | Application  |               | 1/15/2013   |            | 3889/CHENP/2015    | IN | Dynamic Firmware Updating                                                                                                          |
| 84292921     | Application  |               | 1/31/2013   |            | 3914/CHENP/2015    | IN | LIQUID COOLING                                                                                                                     |
| 84304342     | Application  |               | 7/8/2015    |            | 3486/CHE/2015      | IN | LOCATION OF OBJECT WITHIN NETWORK OF OBJECTS                                                                                       |
| 84312961     | Application  |               | 1/18/2013   |            | 6275/DELNP/2015    | IN | TASK ASSIGNMENT IN CROWDSOURCING                                                                                                   |
| 90017216     | Application  |               | 7/24/2015   |            | 3819/CHE/2015      | IN | TOPICAL VIDEO NAVIGATION                                                                                                           |
| 90035150     | Acknowledged |               |             |            |                    | IN | Framework to Automate Shrink Wrapping of a Cloud Instance                                                                          |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 90035261     | Acknowledged |               |             |            |                    | IN | Dynamic Event Correlation For NFV                                                                                                  |
| 90035968     | To Be Filed  |               |             |            |                    | IN | Method for SSD Cache management                                                                                                    |
| 90037302     | To Be Filed  |               |             |            |                    | IN | An apparatus for out of order asynchronous replication across distributed file systems using Unique File System Object Identifiers |
|              |              |               |             |            |                    |    |                                                                                                                                    |
| 90037835     | To Be Filed  |               |             |            |                    | IN | Method and system to intelligently retrieve data on endpoint devices                                                               |
| 90037903     | To Be Filed  |               |             |            |                    | IN | Enhanced unidirectional link detection with hardware assistance and capability discovery                                           |

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|--------------|--------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 90037917     | To Be Filed  |               |             |            |                    | IN | Method for making established TLS connections on network devices seamless in High Availability Public Key Infrastructure environments using certificate revocation lists                                                                       |
| 90038000     | To Be Filed  |               |             |            |                    | IN | Non stop Power Over Ethernet during software upgrade                                                                                                                                                                                           |
| 90038009     | To Be Filed  |               |             |            |                    | IN | Method for creating Application based thin Snapshots for orchestrating Big Data management                                                                                                                                                     |
| 90039581     | Application  |               | 42265       |            | 5013/CHE/2015      | IN | FORWARD MODIFIED VERSION OF DUPLICATE ADDRESS SOLICITATION PACKET                                                                                                                                                                              |
| 90039630     | To Be Filed  |               |             |            |                    | IN | Network Intrusion Prevention of Rogue APs by corrupting Forwarding Tables                                                                                                                                                                      |
| 90040546     | Acknowledged |               |             |            |                    | IN | A solution to prevent the security vulnerability on release automation tool component or application deployment designs using application security solution tool before the designs are used to deploy application on hybrid cloud environment |
| 90048589     | Application  |               | 42257       |            | 4820/CHE/2015      | IN | GUEST ACCESS PROVISIONING                                                                                                                                                                                                                      |
| 90054380     | Application  |               | 9/24/2015   |            | 5110/CHE/2015      | IN | HIERARCHICAL INDEX INVOLVING PRIORITIZATION OF DATA CONTENT OF INTEREST                                                                                                                                                                        |
| 90056374     | Application  |               | 41367       |            | 5695/CHE/2015      | IN | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                                                                                                                                                    |
| 90066010     | Acknowledged |               |             |            |                    | IN | A Homegrown Virtual Machine IO Accelerator for Near-Bare Metal Performance in Unified File Service                                                                                                                                             |
| 90037015     | To Be Filed  |               |             |            |                    | IN | WRITE I/O profiling during data Migration                                                                                                                                                                                                      |
| 83957719     | Application  |               | 7/18/2014   |            | 3536/CHE/2014      | IN | CONFLICT DETECTION IN A HYBRID NETWORK DEVICE                                                                                                                                                                                                  |
| 84211149     | Application  |               | 4/3/2015    |            | 1781/CHE/2015      | IN | ADDRESS CACHE FOR TUNNEL ENDPOINT ASSOCIATED WITH AN OVERLAY NETWORK                                                                                                                                                                           |
| 82207295     | Application  |               | 8/1/2007    |            | 522/CHE/2009       | IN | Cooling Fan Module                                                                                                                                                                                                                             |
| 82240628     | Application  |               | 39576       |            | 7942/CHE/2010      | IN | A Method For Interfacing A Fibre Channel Network With An Ethernet Based Network                                                                                                                                                                |
| 82212974     | Application  |               | 38789       |            | 445/CHE/2006       | IN | Migrating Data In A Storage System                                                                                                                                                                                                             |
| 82227524     | Application  |               | 8/27/2007   |            | 1917/CHE/2007      | IN | Prioritising Data Processing Operations                                                                                                                                                                                                        |
| 82244501     | Application  |               | 10/23/2008  |            | 2595/CHE/2008      | IN | Input/output Workload Analysis Method And System For A Storage Area Network                                                                                                                                                                    |
| 82249181     | Application  |               | 12/22/2008  |            | 3239/CHE/2008      | IN | Data Storage Network Management Method, Computer Program And Server                                                                                                                                                                            |
| 84173622     | Application  |               | 5/25/2015   |            | 2612/CHE/2015      | IN | STORAGE MANAGEMENT                                                                                                                                                                                                                             |
| 84273911     | Application  |               | 7/24/2015   |            | 3822/CHE/2015      | IN | CACHING MECHANISM                                                                                                                                                                                                                              |
| 82241444     | Application  |               | 2/18/2008   |            | 4957/CHE/2010      | IN | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device                                                                                                                                                |
| 82716611     | Application  |               | 10/30/2008  |            | 2503/CHE/2011      | IN | BIT Inversion For Communication Interface                                                                                                                                                                                                      |

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| 82274783     | Application  |               | 12/7/2005   |            | 3295/DEL/2005      | IN | Self-Configurable Telephony Architecture                                                                                                                       |
| 82607457     | Application  |               | 6/17/2011   |            | 2053/CHE/2011      | IN | DRAWING POWER OVER NETWORK CABLE                                                                                                                               |
| 83942797     | Application  |               | 4/30/2014   |            | 2196/CHE/2014      | IN | DATA PLANE TO FORWARD TRAFFIC BASED ON COMMUNICATIONS FROM A SOFTWARE DEFINED NETWORKING (SDN) CONTROLLER DURING CONTROL PLANE FAILURE                         |
| 84261634     | Application  |               | 8/8/2015    |            | 4141/CHE/2015      | IN | Data Restoration                                                                                                                                               |
| 90001592     | Application  |               | 7/31/2015   |            | 3949/CHE/2015      | IN | SNAPSHOT STORAGE MANAGEMENT                                                                                                                                    |
| 82253555     | Application  |               | 12/6/2002   |            | 01804/DELNP/2004   | IN | Network User Authentication System And Method                                                                                                                  |
| 82850379     | Application  |               | 4/28/2010   |            | 6864/CHENP/2011    | IN | IMPROVEMENTS IN OR RELATING TO DATA CENTERS                                                                                                                    |
| 90031456     | Application  |               | 8/21/2015   |            | 4385/CHE/2015      | IN | VIRTUAL MACHINE STORAGE MANAGEMENT                                                                                                                             |
| 82116767     | Granted      | 198971        | 12/11/1997  | 38820      | 2354/CAL/1997      | IN | A SYSTEM AND METHOD FOR OPTIMIZING DATABASE QUERIES WITH IMPROVED PERFORMANCE ENHANCEMENTS                                                                     |
| 82251059     | Application  |               | 4/29/2009   |            | 986/CHE/2009       | IN | Method And System For Determining Network Topology Of A Virtual Private Network In Multi Protocol Label Switching (MPLS) Based Virtual Private Networks (vpns) |
| 82915394     | Application  |               | 1/12/2012   |            | 139/CHE/2012       | IN | Managing Data Paths Between Computer Applications And Data Storage Devices                                                                                     |
| 90039700     | Application  |               | 9/11/2015   |            | 4839/CHE/2015      | IN | DATA CENTER CAPACITY MANAGEMENT                                                                                                                                |
| 90040238     | To Be Filed  |               |             |            |                    | IN | Optimized Data Modeling Technique for Dimension Change Management in a Data Warehouse                                                                          |
| 82997200     | Application  |               | 4/25/2012   |            | 1622/CHE/2012      | IN | SYMBOL-BASED MERGING OF COMPUTER PROGRAMS                                                                                                                      |
| 83012334     | Application  |               | 9/27/2012   |            | 4015/CHE/2012      | IN | Managing Compliance Across Information Technology Components                                                                                                   |
| 90041340     | Acknowledged |               |             |            |                    | IN | Deployment of application by automatically identifying and integrating the platform dependencies at runtime using simple definitions                           |
| 82217717     | Application  |               | 4/18/2007   |            | 5830/CHENP/2008    | IN | Providing Different Network Services To A Network Agent                                                                                                        |
| 82235828     | Application  |               | 39766       |            | 2798/CHE/2008      | IN | Communication Methods And Systems                                                                                                                              |
| 83700267     | Application  |               | 7/25/2011   |            | 284/DELNP/2014     | IN | Transferring a Conference Session Between Conference Servers Due to Failure                                                                                    |
| 83991301     | Application  |               | 4/20/2012   |            | 6037/DELNP/2014    | IN | Unified User Profiles                                                                                                                                          |
| 84263114     | Application  |               | 42171       |            | 3016/CHE/2015      | IN | Virtualized Network Function Monitoring                                                                                                                        |
| 82228145     | Application  |               | 7/26/2007   |            | 1616/CHE/2007      | IN | An Efficient Stacked File System And Method                                                                                                                    |
| 82237949     | Application  |               | 9/11/2008   |            | 2199/CHE/2008      | IN | Dynamic Allocation Of Virtual Machine Devices                                                                                                                  |
| 83205120     | Application  |               | 5/30/2013   |            | 2381/CHE/2013      | IN | Preserving Object Code Translations Of A Library For Future Reuse By An Emulator                                                                               |
| 84114312     | Application  |               | 12/30/2014  |            | 6750/CHE/2014      | IN | CLUSTER ARBITRATION                                                                                                                                            |
| 84172563     | Application  |               | 5/28/2015   |            | 2690/CHE/2015      | IN | Improving Performance of Virtual Machines                                                                                                                      |

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| 83957610     | Application |               | 7/22/2014   |            | 3589/CHE/2014      | IN | ENSURING DATA INTEGRITY OF A RETAINED FILE UPON REPLICATION                                                                   |
| 83958815     | Application |               | 7/31/2014   |            | 3764/CHE/2014      | IN | POLICY-BASED DATA PROTECTION                                                                                                  |
| 90037310     | To Be Filed |               |             |            |                    | IN | PIP-OBI: Relevance Optimized Approximate Storage System with Data Thumbnails and Representative Objects                       |
| 82675343     | Application |               | 11/13/2009  |            | 2293/CHENP/2011    | IN | Data Centre And Apparatus And Method For Data Centre Cooling                                                                  |
| 82676471     | Application |               | 10/21/2009  |            | 1755/CHENP/2011    | IN | DATA CENTER AND DATA CENTER DESIGN                                                                                            |
| 84030591     | Application |               | 12/3/2014   |            | 6093/CHE/2014      | IN | UPDATING A VIRTUAL NETWORK TOPOLOGY BASED MONITORED APPLICATION DATA                                                          |
| 82191374     | Granted     | 267338        | 11/8/2005   | 42200      | 1618/CHE/2005      | IN | Persistent Memory Manipulation Using EFI                                                                                      |
| 82256861     | Application |               | 38743       |            | 01271/MUMNP/2007   | IN | System, Method, And Computer Program Product For Byte-based Utility Computing Pricing                                         |
| 82223402     | Application |               | 7/11/2007   |            | 207/CHENP/2009     | IN | Defect-and-failure-tolerant Demultiplexer Using Series Replication And Error-control Encoding                                 |
| 83134887     | Application |               | 6/16/2010   |            | 9748/CHENP/2012    | IN | Computer Racks                                                                                                                |
| 83957644     | Application |               | 11/10/2014  |            | 5654/CHE/2014      | IN | Online File System Check                                                                                                      |
| 83964345     | Application |               | 7/29/2014   |            | 3695/CHE/2014      | IN | VIRTUAL FILE SERVER                                                                                                           |
| 84034624     | Application |               | 12/23/2014  |            | 6514/CHE/2014      | IN | Data Deduplication                                                                                                            |
| 84034644     | Application |               | 1/19/2015   |            | 287/CHE/2015       | IN | Access control to a portion of a file system object                                                                           |
| 84055285     | Application |               | 11/3/2014   |            | 5491/CHE/2014      | IN | POLICY AND CONFIGURATION DATA FOR A USER DIRECTORY                                                                            |
| 90037298     | To Be Filed |               |             |            |                    | IN | SHIFT-SCAN: A Methodology to Improve the Free Space Scan and Allocation Performance on File Systems Employing Storage Bitmaps |
| 82240253     | Application |               | 5/7/2008    |            | 1120/CHE/2008      | IN | System And Method For Concurrency Control Of Logically Grouped Shared Objects In A Multi-user Environment                     |
| 82653588     | Application |               | 9/22/2009   |            | 1140/CHENP/2011    | IN | DIFFERENTIAL ON-LINE TERMINATION                                                                                              |
| 84106251     | Application |               | 5/24/2012   |            | 8257/CHENP/2014    | IN | Fiber Connector Assembly                                                                                                      |
| 84106354     | Application |               | 6/27/2012   |            | 8265/CHENP/2014    | IN | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                                                                                   |
| 90051553     | Application |               | 41362       |            | 5502/CHENP/2015    | IN | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING NODE                                                                             |
| 82559528     | Application |               | 6/10/2008   |            | 8114/CHENP/2010    | IN | Presenting Multi-function Devices Behind A Switch Hierarchy As A Single Function Device                                       |
| 82207724     | Application |               | 3/21/2006   |            | 504/CHE/2006       | IN | Virtually Unlimited Storage                                                                                                   |
| 82408611     | Application |               | 5/28/2008   |            | 7659/CHENP/2010    | IN | Providing Object-level Input/output Requests Between Virtual Machines To Access A Storage Subsystem                           |

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| 84261104     | Application  |               | 7/18/2015   |            | 3697/CHE/2015      | IN | DATA VOLUME MIGRATION IN DISTRIBUTED STORAGE SYSTEMS                                                                                                                                                                             |
| 84262667     | Application  |               | 6/23/2015   |            | 3150/CHE/2015      | IN | Task Execution In A Storage Area Network (SAN)                                                                                                                                                                                   |
| 90037344     | To Be Filed  |               |             |            |                    | IN | Efficient back up mechanism by eliminating IO requests in unwritten pages                                                                                                                                                        |
| 90065997     | Acknowledged |               |             |            |                    | IN | Hyperconverged solutions such as Nutanix rely on data locality to improve its performance characteristics. HP StoreVirtual inhibits data locality due to the inherent node based striping. A solution to this is presented here. |
| 82241558     | Application  |               | 3/25/2008   |            | 5482/CHENP/2010    | IN | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                                                                                                                                           |
| 83177122     | Application  |               | 1/31/2013   |            | 277/DEL/2013       | IN | NETWORK MANAGEMENT ACCESS BASED PREVIOUS REGISTRATION OF USER DEVICE                                                                                                                                                             |
| 83208778     | Application  |               | 3/15/2013   |            | 771/DEL/2013       | IN | LOOP-FREE HYBRID NETWORK                                                                                                                                                                                                         |
| 83277534     | Application  |               | 41439       |            | 2592/CHE/2013      | IN | Measuring Flow Activity On An Openflow Enabled Network Device                                                                                                                                                                    |
| 84264078     | Application  |               | 42252       |            | 4708/CHE/2015      | IN | Maintaining Bidirectional Forwarding Detection (BFD) Sessions On A Network Device Upon Reboot                                                                                                                                    |
| 83992775     | Application  |               | 4/25/2012   |            | 5882/DELNP/2014    | IN | FILE TRANSFER USING XML                                                                                                                                                                                                          |
| 84266580     | Application  |               | 7/31/2015   |            | 3993/CHE/2015      | IN | Password Based Access Control                                                                                                                                                                                                    |
| 82987728     | Application  |               | 4/2/2012    |            | 1317/CHE/2012      | IN | INFORMATION MANAGEMENT POLICY BASED ON RELATIVE IMPORTANCE OF A FILE                                                                                                                                                             |
| 90024105     | Application  |               | 7/31/2015   |            | 3987/CHE/2015      | IN | BACKUP CHANGE IN TRANSACTION LOG FILE                                                                                                                                                                                            |
| 84169125     | Application  |               | 4/13/2015   |            | 1910/CHE/2015      | IN | SUBSCRIBER IDENTITY PATTERN                                                                                                                                                                                                      |
| 82205228     | Application  |               | 8/14/2007   |            | 1810/CHE/2007      | IN | Spam Control Systems And Methods                                                                                                                                                                                                 |
| 83955961     | Application  |               | 9/10/2014   |            | 4440/CHE/2014      | IN | DETERMINING OPTIMUM RESOURCES FOR AN ASYMMETRIC DISASTER RECOVERY SITE OF A COMPUTER CLUSTER                                                                                                                                     |
| 83985639     | Application  |               | 2/21/2012   |            | 5721/DELNP/2014    | IN | MAINTAINING SYSTEM FIRMWARE IMAGES REMOTELY USING A DISTRIBUTUTE FILE SYSTEM PROTOCOL                                                                                                                                            |
| 90035154     | Acknowledged |               |             |            |                    | IN | Efficient way of handling the Application-recovery in a Site Aware Disaster Tolerant Architecture                                                                                                                                |
| 82256234     | Granted      | 256212        | 4/21/2005   | 41410      | 1380/MUMNP/2006    | IN | METHOD AND SYSTEM FOR STORING SELF-DESCRIPTIVE TABULAR DATA WITH ALPHANUMERIC AND BINARY VALUES                                                                                                                                  |
| 82691759     | Published    |               | 9/4/2009    |            | 2387/DELNP/2011    | IN | Storing Log Data Efficiently While Supporting Querying                                                                                                                                                                           |
| 84169145     | Application  |               | 8/18/2015   |            | 4322/CHE/2015      | IN | File Repository                                                                                                                                                                                                                  |
| 82654467     | Application  |               | 8/27/2008   |            | 1329/CHENP/2011    | IN | Performing Zone Based Workload Scheduling According To Environmental Conditions                                                                                                                                                  |

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| 83956064     | Application  |               | 41815       |            | 3087/CHE/2014      | IN | SELECTING AN OPTIMAL NETWORK DEVICE FOR REPORTING                                      |
|              |              |               |             |            |                    |    | FLOW TABLE MISSES UPON EXPIRY OF A FLOW IN A SOFTWARE DEFINED NETWORK                  |
| 84076347     | Application  |               | 6/25/2012   |            | 7468/CHE/2014      | IN | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                             |
| 84113493     | Application  |               | 1/30/2015   |            | 468/CHE/2015       | IN | FORWARDING TABLE OF HYBRID SOFTWARE DEFINED NETWORKING SWITCH                          |
| 84121943     | Application  |               | 1/28/2015   |            | 399/CHE/2015       | IN | DATA LOOP DETERMINATION WITH A SOFTWARE-DEFINED NETWORK CONTROLLER                     |
| 82819012     | Application  |               | 3/31/2009   |            | 5960/CHE/2011      | IN | Determining power Topology Of Plurality Of Computer Systems                            |
| 83958368     | Application  |               | 5/23/2014   |            | 2575/CHE/2014      | IN | USING LOCATION ADDRESSED STORAGE AS CONTENT ADDRESSED STORAGE                          |
| 83958780     | Application  |               | 7/17/2014   |            | 3522/CHE/2014      | IN | PARTIAL SNAPSHOT CREATION                                                              |
| 84033842     | Application  |               | 10/17/2014  |            | 5217/CHE/2014      | IN | FILE SYSTEM JOURNALING                                                                 |
| 84173710     | Application  |               | 5/23/2015   |            | 2585/CHE/2015      | IN | TRANSLATE DATA OPERATIONS BASED ON DATA STRIPE SIZE                                    |
|              |              |               |             |            |                    |    |                                                                                        |
| 84261616     | Application  |               | 7/9/2015    |            | 3518/CHE/2015      | IN | Managing A Database Index File                                                         |
| 82250102     | Application  |               | 6/22/2009   |            | 1464/CHE/2009      | IN | Method And System For Visualizing A Storage Area Network                               |
| 84273876     | Application  |               | 7/22/2015   |            | 3784/CHE/2015      | IN | Improving the data availability during Site Failover in Async Remote Replication Setup |
| 90037352     | To Be Filed  |               |             |            |                    | IN | Efficient prefetch mechanism in distributed storage systems                            |
| 90065988     | Acknowledged |               |             |            |                    | IN | FCoE Aggregation between an Edge Device and an FCoE Switch                             |
| 83177096     | Application  |               | 1/30/2013   |            | 266/DEL/2013       | IN | NETWORK ACCESS MANAGEMENT BASED ON SESSION INFORMATION                                 |
| 82274951     | Application  |               | 6/12/2009   |            | 1206/DEL/2009      | IN | Method for Implementing Distributed Voice Functions Into Software Applications         |
| 82391284     | Application  |               | 10/28/2010  |            | 3216/CHE/2010      | IN | Providing Cloud-Based Computing Services                                               |
| 83874375     | Application  |               | 41737       |            | 1858/CHE/2014      | IN | PIPELINE TABLE IDENTIFICATION                                                          |
| 83933499     | Application  |               | 41754       |            | 2113/CHE/2014      | IN | FLOW SAMPLE                                                                            |
| 84171383     | Application  |               | 4/29/2015   |            | 2202/CHE/2015      | IN | CLIENT COMMUNICATIONS IN MULTI-TENANT DATA CENTER NETWORKS                             |
| 90037913     | To Be Filed  |               |             |            |                    | IN | OpenFlow assisted multi-hop Bi-directional Forwarding Detection (BFD)                  |
| 83957592     | Application  |               | 7/4/2014    |            | 3319/CHE/2014      | IN | DATA DEPLICATION                                                                       |
| 84034612     | Application  |               | 10/28/2014  |            | 5370/CHE/2014      | IN | SNAPSHOT CREATION                                                                      |

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| 90037315     | To Be Filed  |               |             |            |                    | IN | Zero detecting restore process for recovery manager central                                                                                                                                        |
| 82256534     | Application  |               | 8/9/2006    |            | 00129/INUMNP/2008  | IN | Enterprise Application Server System And Method                                                                                                                                                    |
| 90037086     | To Be Filed  |               |             |            |                    | IN | System and method of application-aware backups without installing backup agent inside VM                                                                                                           |
| 84116046     | Application  |               | 4/8/2015    |            | 1841/CHE/2015      | IN | Managing Cost Related to Usage of Cloud Resources                                                                                                                                                  |
| 90040541     | Acknowledged |               |             |            |                    | IN | Security Vulnerability machine transformation & Analysis as a Service to enable assess vulnerabilities                                                                                             |
| 82219763     | Application  |               | 39085       |            | 3717/CHENP/2008    | IN | Call Screening For VOIP Calls At Gateway                                                                                                                                                           |
| 82724419     | Published    |               | 4/20/2011   |            | 1168/DEL/2011      | IN | SYSTEMS AND METHODS FOR PROVIDING PROMOTIONAL CONTENT DURING A CALL ATTEMPT                                                                                                                        |
| 84263574     | Application  |               | 42174       |            | 3075/CHE/2015      | IN | FILE PROCESSING WORKFLOW MANAGEMENT                                                                                                                                                                |
| 82188050     | Application  |               | 9/21/2005   |            | 1337/CHE/2005      | IN | Transparent Migration Of Files Among Various Types Of Storage Volumes Based On File Access Properties                                                                                              |
| 82229750     | Application  |               | 39377       |            | 2383/CHE/2007      | IN | A Method And System For Transferring Files                                                                                                                                                         |
| 82238807     | Application  |               | 1/14/2008   |            | 133/CHE/2008       | IN | System And Method For Flexible Device Driver Resource Allocation                                                                                                                                   |
| 82240490     | Application  |               | 4/22/2008   |            | 995/CHE/2008       | IN | Method Of Computer Clustering                                                                                                                                                                      |
| 82262531     | Application  |               | 10/31/2011  |            | 3106/DEL/2011      | IN | File Lock Preservation                                                                                                                                                                             |
| 83874309     | Application  |               | 4/10/2014   |            | 1898/CHE/2014      | IN | Relocating A Virtual Address In A Persistent Memory                                                                                                                                                |
| 83932769     | Application  |               | 4/28/2014   |            | 2134/CHE/2014      | IN | Improving Startup Time Of Managed Code                                                                                                                                                             |
| 82948569     | Published    |               | 8/7/2006    |            | 1704/DELNP/2008    | IN | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                                                                                                      |
| 82255289     | Granted      | 211086        | 1/23/2004   |            | 0693/NUMNP/2005    | IN | SYSTEM AND METHOD FOR COMPOSING, CONFIGURING, DEPLOYING, AND MANAGING SERVICES USING A GRAPHICAL USER INTERFACE                                                                                    |
| 84140108     | Application  |               | 10/30/2012  |            | 302/CHENP/2015     | IN | ANALYZING DATA WITH COMPUTER VISION                                                                                                                                                                |
| 82254041     | Granted      | 240432        | 5/6/2003    |            | 2490/CHENP/2004    | IN | Payment System And Method                                                                                                                                                                          |
| 82195856     | Granted      | 261309        | 4/26/2006   |            | 4481/CHENP/2007    | IN | Nanoscale Interconnection Interface                                                                                                                                                                |
| 83957738     | Application  |               | 6/18/2014   |            | 2974/CHE/2014      | IN | AUTOMATIC RE-ROUTING OF NETWORK TRAFFIC IN A SOFTWARE-DEFINED NETWORK                                                                                                                              |
| 84121957     | Application  |               | 1/30/2015   |            | 478/CHE/2015       | IN | ADJUSTED SPANNING TREE PROTOCOL PATH COST VALUES IN A SOFTWARE DEFINED NETWORK                                                                                                                     |
| 84148266     | Application  |               | 1/29/2015   |            | 426/CHE/2015       | IN | INTERMEDIARY NETWORK ELEMENT FOR TAP TRAFFIC                                                                                                                                                       |
| 84150616     | Application  |               | 2/28/2015   |            | 980/CHE/2015       | IN | Refresh Flow Entry                                                                                                                                                                                 |
| 90039539     | Acknowledged |               |             |            |                    | IN | Smartly prepare a newly added ESXi host in vCenter which is tightly coupled with special kind of service VM for tenant VM's network traffic or any other service VM serving any kind of services.. |

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| 83995826     | Application |               | 4/20/2012   |            | 5415/CHENP/2014    | IN | VOLTAGE REGULATOR CONTROL SYSTEM                                                                           |
| 82240370     | Application |               | 4/14/2008   |            | 5985/CHENP/2010    | IN | Fan For Computer Element In The Service Position                                                           |
| 82580953     | Application |               | 7/31/2008   |            | 500/CHENP/2011     | IN | Heatsink With A Plurality Of Fans                                                                          |
| 82948563     | Published   |               | 1/23/2006   |            | 6130/DELNP/2007    | IN | MULTI-DIMENSIONAL SURROGATES FOR DATA MANAGEMENT                                                           |
| 84264441     | Application |               | 41242       |            | 3089/CHENP/2015    | IN | IMAGE ANALYSIS                                                                                             |
| 82238669     | Application |               | 12/20/2007  |            | 3957/CHENP/2010    | IN | AUTOMATED MODEL GENERATION FOR COMPUTER BASED BUSINESS PROCESS                                             |
| 84260594     | Application |               | 7/31/2015   |            | 3997/CHE/2015      | IN | MANAGEMENT OF CONTENT STORAGE AND RETRIEVAL                                                                |
| 84034632     | Application |               | 11/27/2014  |            | 5956/CHE/2014      | IN | PROVIDING A LOAN OF STORAGE SPACE IN A DATA STORAGE SYSTEM                                                 |
| 84054964     | Application |               | 11/1/2014   |            | 5485/CHE/2014      | IN | DATA MANAGEMENT FOR TENANTS                                                                                |
| 84114809     | Application |               | 1/29/2015   |            | 424/CHE/2015       | IN | FILE SYSTEM REPLICATION                                                                                    |
| 84261630     | Application |               | 7/17/2015   |            | 3683/CHE/2015      | IN | Managing Appendable State of an Immutable File                                                             |
| 90037306     | To Be Filed |               |             |            |                    | IN | A Method for Accurate Enforcement of Quota Limits in a Distributed File System                             |
| 84099724     | Application |               | 41947       |            | 5530/CHE/2014      | IN | DEMAND FORECASTING AND SIMULATION                                                                          |
| 83984204     | Application |               | 1/6/2012    |            | 4948/CHENP/2014    | IN | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION |
|              |             |               |             |            |                    |    | Firmware Storage Medium With Customized Image                                                              |
| 82672076     | Application |               | 10/8/2008   |            | 1872/CHENP/2011    | IN | A Method Or Apparatus For Providing Storage In A Network                                                   |
| 82203650     | Application |               | 8/29/2005   |            | 1203/CHE/2005      | IN | Method and System for Using a Packet-Network Telephone to Schedule a Conference Call                       |
| 82274630     | Application |               | 9/21/2006   |            | 2080/DEL/2006      | IN | Screening Of Calls In A Packet-based Network                                                               |
| 82210016     | Application |               | 8/7/2006    |            | 888/CHENP/2008     | IN | SYSTEM AND METHOD FOR DATA COMMUNICATION USING A CLASSIFIED FLOW TABLE IN OPENFLOW NETWORKS                |
| 83080900     | Application |               | 8/1/2012    |            | 3165/CHE/2012      | IN |                                                                                                            |
|              |             |               |             |            |                    |    | MULTICAST CONTROL                                                                                          |
| 83932093     | Application |               | 6/12/2014   |            | 2875/CHE/2014      | IN | MANAGING MULTIPLE ACTIVE SEGMENTS IN A STACKING SYSTEM                                                     |
| 84264066     | Application |               | 9/29/2015   |            |                    | IN | APPARATUS, AND ASSOCIATED METHOD, FOR DETECTING FRAUDULENT TEXT MESSAGE                                    |
| 82584167     | Published   |               | 40029       |            | 8532/CHENP/2010    | IN | IMPROVEMENTS IN OR RELATING TO COOLING                                                                     |
| 82858559     | Application |               | 4/28/2010   |            | 7248/CHENP/2011    | IN | METHOD AND SYSTEM OF CONTENT DEVELOPMENT FOR A DATA WAREHOUSE                                              |
| 82263020     | Application |               | 7/1/2010    |            | 1863/CHE/2010      | IN | Automatic Selection Of Agent-based Or Agentless Monitoring                                                 |
| 82258967     | Published   |               | 9/15/2009   |            | 2231/CHE/2009      | IN |                                                                                                            |
| 84162675     | Application |               | 8/29/2012   |            | 978/CHENP/2015     | IN | SECURITY SCAN BASED ON DYNAMIC TAINT                                                                       |
| 84033109     | Application |               | 12/5/2014   |            | 6128/CHE/2014      | IN | CLOUD SERVICE RATING                                                                                       |

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| 82202903     | Application |               | 7/18/2006   |            | 614/CHE/2008       | IN | Automated Application Server (AS) Permissions Provisioning                                                                        |
| 82220315     | Application |               | 7/10/2007   |            | 474/CHE/2009       | IN | Interface Module                                                                                                                  |
| 82201772     | Application |               | 10/17/2005  |            | 1487/CHE/2005      | IN | Stacked File Systems And Methods                                                                                                  |
| 82239356     | Application |               | 4/11/2008   |            | 920/CHE/2008       | IN | Multi-stream Communication Processing                                                                                             |
| 82241423     | Application |               | 2/26/2008   |            | 5161/CHE/2010      | IN | Method And Apparatus For Performing A Host Enumeration Process                                                                    |
| 83964685     | Application |               | 7/24/2014   |            | 3628/CHE/2014      | IN | DEVICE AUTHENTICATION AGENT                                                                                                       |
| 84094520     | Application |               | 10/30/2014  |            | 5423/CHE/2014      | IN | LOCATION AWARE FAILOVER SOLUTION                                                                                                  |
| 82253216     | Application |               | 4/23/2002   |            | 1727/DELNP/2003    | IN | Method And System For Reporting XML Data Based On Precomputed Context And A Document Object Model                                 |
| 82257656     | Application |               | 7/21/2009   |            | 6007/CHE/2010      | IN | BYTE-BASED METHOD, PROCESS AND ALGORITHM FOR SERVICE-ORIENTED AND UTILITY INFRASTRUCTURE USAGE MEASUREMENT, METERING, AND PRICING |
|              |             |               |             |            |                    |    | WORKLOAD DEPLOYMENT IN COMPUTING NETWORKS                                                                                         |
| 84265145     | Application |               | 7/31/2015   |            | 3994/CHE/2015      | IN | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                                                    |
| 84141092     | Application |               | 9/10/2012   |            | 355/CHE/2015       | IN | Dynamic Data Navigation                                                                                                           |
| 82215824     | Granted     | 267451        | 4/20/2007   | 42205      | 5735/CHE/2008      | IN | SEARCHING DOCUMENT IMAGES                                                                                                         |
| 82263956     | Application |               | 9/18/2010   |            | 2736/CHE/2010      | IN | GUIDING AN IMAGE-BASED TASK EXECUTION                                                                                             |
| 82750799     | Published   |               | 5/27/2011   |            | 1805/CHE/2011      | IN | RETRO-FITTING SYNTHETIC FULL COPIES OF DATA                                                                                       |
| 82948589     | Published   |               | 10/2/2006   |            | 947/DELNP/2009     | IN | Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same                                         |
| 82242545     | Application |               | 3/10/2008   |            | 6260/DELNP/2010    | IN | Method For Setup Automation during Online Volume Migration                                                                        |
| 90036994     | To Be Filed |               |             |            |                    | IN | Controlling an unknown flow inflow to an SDN controller in a software defined network (SDN)                                       |
| 84138204     | Application |               | 3/2/2015    |            | 996/CHE/2015       | IN | MAXIMUM TRANSMISSION UNIT INSTALLATION FOR SWITCHES                                                                               |
| 84263674     | Application |               | 6/30/2015   |            | 3343/CHE/2015      | IN | IN A SOFTWARE-DEFINED NETWORK                                                                                                     |
| 84264046     | Application |               | 7/31/2015   |            | 3952/CHE/2015      | IN | Network Port Profile for Virtual Machines using Network Controller                                                                |
| 82062518     | Granted     | 1281270       | 5/8/2001    | 38917      | 1925734.4          | IT | Operating A Ommunications Infrastructure On A Pre-payment Basis                                                                   |
| 82062539     | Granted     | 1281269       | 37019       | 38476      | 1925726            | IT | Charging For VAS Resource Usage In A Communications Infrastructure                                                                |
| 82116149     | Granted     | 723231        | 1/15/1996   | 37083      | 96300261.3         | IT | METHOD AND APPARATUS FOR PREVENTING INADVERTENT CHANGES TO SYSTEM-CRITICAL FILES IN A COMPUTING SYSTEM                            |
| 82128263     | Granted     | 811937        | 6/4/1997    | 38371      | 97303808.6         | IT | AUTOMATICALLY PREFETCHING DATA IN A COMP-                                                                                         |
| 82165241     | Granted     | 782301        | 12/23/1996  | 37706      | 96120819.6         | IT | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                                    |

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| 82579299     | Granted | 1749386       | 5/4/2005    | 4/14/2010  | 5746753.2          | IT | Pattern Discovery In A Network Security System                                                             |
| 83185311     | Granted | 1715488       | 12/17/1998  | 2/11/2009  | 6011296.8          | IT | Tape Leader Pin Assembly And Method For Making The Same                                                    |
| 82133606     | Granted | 1188339       | 6/23/2000   | 11/24/2004 | 943160.2           | IT | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THROUGH USE DIFFERENT PROTOCOLS |
| 82102325     | Granted | 1413893       | 10/17/2003  | 9/28/2005  | 3256580.6          | IT | System And Method Of Measuring Low Impedances                                                              |
| 82180922     | Granted | 1359207       | 1/12/2005   | 4/21/2009  | RM2005A000012      | IT | Detection Of Errors                                                                                        |
| 82180550     | Granted | 1359206       | 1/12/2005   | 4/21/2009  | RM2005A000011      | IT | Link Failures                                                                                              |
| 81958334     | Granted | 3734888       | 7/19/1996   | 10/28/2005 | H08-190162         | JP | A Microprocessor With Power Management Features                                                            |
| 81966335     | Granted | 3840382       | 2/19/2001   | 8/11/2006  | 2001-041819        | JP | METHOD FOR REDUCING CONTAMINATION OF BRANCH PREDICTION TABLE                                               |
| 81966962     | Granted | 4065674       | 10/26/2001  | 1/11/2008  | 2001-329766        | JP | Data Storage System And Method                                                                             |
| 81978515     | Granted | 4059682       | 2/4/2002    | 12/28/2007 | 2002-026922        | JP | Method And Structure For Characterization Of Bayesian Belief Networks                                      |
| 81978746     | Granted | 3973476       | 4/10/2002   | 6/22/2007  | 2002-107879        | JP | Status Transfer Using Frequency                                                                            |
| 81978944     | Granted | 4549593       | 11/20/2001  | 7/16/2010  | 2001-353969        | JP | Dual Bar Code Reading System For A Data Storage System                                                     |
| 81983807     | Granted | 4008224       | 10/15/2001  | 9/7/2007   | 2001-316210        | JP | Cache Coherence Protocol For A Multiple Bus Multiprocessor System                                          |
| 81994157     | Granted | 3786418       | 2/20/2004   | 3/31/2006  | 2004-043852        | JP | Directory-Based Coherency Scheme For Reducing Memory Bandwidth Loss                                        |
| 82006232     | Granted | 4361310       | 4/17/2003   | 8/21/2009  | 2003-112891        | JP | Wrap-around Cooling Arrangement For Printed Circuit Board                                                  |
| 82012841     | Granted | 4528372       | 7/24/1996   | 6/11/2010  | H08-194520         | JP | Frame Structure                                                                                            |
| 82020950     | Granted | 3974238       | 10/21/1997  | 6/22/2007  | H09-288143         | JP | Method And Apparatus For Automatic Device Segmentation And Port-to-segment Distribution                    |
| 82025000     | Granted | 4041218       | 7/9/1998    | 11/16/2007 | H10-210447         | JP | Automatic Internet Protocol (IP) Address Allocation And Assignment                                         |
| 82028267     | Granted | 4266423       | 1/6/1999    | 2/27/2009  | H11-000861         | JP | Servo Band Identification In Linear Tape Systems Having Timing-based Servo Formats                         |
| 82030832     | Granted | 4248661       | 2/19/1999   | 1/23/2009  | H11-041607         | JP | Efficient Routing Of Transactions With Ordering Constraints                                                |
| 82034318     | Granted | 3187022       | 3/2/1999    | 5/11/2001  | H11-054785         | JP | Tape Cartridge Reel Lock                                                                                   |
| 82036235     | Granted | 3287815       | 7/21/1999   | 3/15/2002  | H11-206012         | JP | Resiliently Biased Parking Seat For Receiving The Leader Pin Of A Single Reel Tape Cartridge               |
| 82037939     | Granted | 4562226       | 12/20/1999  | 8/6/2010   | H11-361036         | JP | Network Appliance Combining Asynchronous Notification With Interactive Network Transfer Protocol Server    |
| 82038137     | Granted | 3142528       | 3/8/1999    | 12/22/2000 | H11-059798         | JP | Two Axis Reading Of Memory Chip In Cartridge                                                               |
| 82042436     | Granted | 3174775       | 9/7/1999    | 3/30/2001  | H11-253265         | JP | Tape Leader Pin Clamp And Method For Securing Same To Leader Pin Assembly                                  |

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| 82043117     | Granted | 3894698       | 3/9/2000    | 12/22/2006 | 2000-064480        | JP | Hybrid Just-in-time Compiler That Consumes Minimal Resource                                                          |
| 82044440     | Granted | 4497605       | 11/11/1999  | 4/23/2010  | H11-320977         | JP | Private Arbitrated Loop Self-test Management For A Fibre Channel Storage Enclosure                                   |
| 82044548     | Granted | 4009049       | 2/24/2000   | 9/7/2007   | 2000-046870        | JP | Data Cartridge Exchange Apparatus                                                                                    |
| 82049624     | Granted | 3587758       | 4/7/2000    | 8/20/2004  | 2000-106140        | JP | Firm Addressing For Devices On A Fibre Channel Arbitrated Loop                                                       |
| 82056479     | Granted | 4723102       | 2/26/2001   | 4/15/2011  | 2001-050405        | JP | Protocol For Insuring Exactly Once Semantics Of Transactions Across An Unordered, Unreliable Network                 |
| 82062719     | Granted | 4818542       | 8/9/2001    | 9/9/2011   | P2001-241933       | JP | Performance Of A Service On A Computing Platform                                                                     |
| 82064084     | Granted | 3895677       | 12/9/2002   | 12/22/2006 | 2002-356939        | JP | System And Method For Managing A Moveable Media Library With Library Partitions                                      |
| 82065602     | Granted | 4667707       | 12/24/2002  | 1/21/2011  | 2002-371841        | JP | System And Method For Intermediating Communication With A Moveable Media Library Utilizing A Plurality Of Partitions |
|              |         |               |             |            |                    |    |                                                                                                                      |
| 82066844     | Granted | 3886536       | 1/17/1997   | 12/1/2006  | H09-525814         | JP | OFDM FEC                                                                                                             |
| 82069391     | Granted | 4519261       | 4/27/2000   | 5/28/2010  | 2000-126830        | JP | Loop Prevention In Networks                                                                                          |
| 82079957     | Granted | 4309215       | 9/9/2003    | 5/15/2009  | 2003-317256        | JP | Circuit Cooling Apparatus                                                                                            |
| 82080878     | Granted | 4222917       | 9/30/2003   | 11/28/2008 | 2003-340093        | JP | Virtual Storage Systems And Virtual Storage System Operational Methods                                               |
| 82081007     | Granted | 4511824       | 12/25/2003  | 5/14/2010  | 2003-430798        | JP | System And Method For Migrating Data Between Memories                                                                |
| 82082210     | Granted | 4440648       | 1/22/2003   | 1/15/2010  | 2003-563183        | JP | A Method Of Hand-off Of A Data Session                                                                               |
| 82082699     | Granted | 4386410       | 5/16/2003   | 10/9/2009  | 2003-138804        | JP | Method And System For Dynamically Allocating Computer System Resources                                               |
| 82082897     | Granted | 4522056       | 6/9/2003    | 6/4/2010   | 2003-163514        | JP | Four-drop Bus With Matched Response                                                                                  |
| 82084808     | Granted | 4318459       | 1/7/2003    | 6/5/2009   | 2003-000942        | JP | Hardware Pay-per-use                                                                                                 |
| 82087190     | Granted | 4059859       | 3/11/2004   | 12/28/2007 | 2004-068807        | JP | Apparatus For Sensing The Presence Of An Inductive Load Driven By A Pulse Width Modulated Signal                     |
| 82087199     | Granted | 4421333       | 3/2/2004    | 12/11/2009 | 2004-057270        | JP | Enhanced Antenna Using Flexible Circuitry                                                                            |
| 82090580     | Granted | 4112420       | 4/30/2003   | 4/18/2008  | 2003-125028        | JP | Method And System For Allocating System Resources Among Applications Using Weights                                   |
| 82092680     | Granted | 4098288       | 8/25/2004   | 3/21/2008  | 2004-245339        | JP | High Performance Cooling Device With Vapor Chamber                                                                   |
| 82093514     | Granted | 4084765       | 3/17/2004   | 2/22/2008  | 2004-076715        | JP | An Assembly And Method For Balancing Processors In A Partitioned Server                                              |
| 82094132     | Granted | 3968095       | 8/20/2004   | 6/8/2007   | 2004-240636        | JP | A Multi-dimensional Deglitch Filter For High Speed Digital Signals                                                   |
| 82095932     | Granted | 4304055       | 12/1/2003   | 5/1/2009   | 2003-400950        | JP | Method And Architecture To Provide Client Session Failover                                                           |
| 82097234     | Granted | 4047315       | 9/10/2004   | 11/30/2007 | 2004-263172        | JP | System And Method For Determining The Value Of A Memory Element                                                      |
| 82097822     | Granted | 4927335       | 11/21/2003  | 2/17/2012  | P2004-557274       | JP | Cooling System With Evaporators Distributed In Series                                                                |

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| 82098422     | Granted | 5011490       | 8/28/2007   | 6/15/2012  | P2009-528231       | JP | Indicating Device for Computer System having Electronic Components                                                |
| 82100315     | Granted | 3903052       | 10/13/2004  | 1/12/2007  | 2004-298490        | JP | Method For Correcting Errors In A Digital System                                                                  |
| 82103252     | Granted | 3962026       | 2/27/2004   | 5/25/2007  | 2004-052876        | JP | System And Method For Application Programming Interface For Extended Intelligent Platform Management              |
| 82103789     | Granted | 4459755       | 8/25/2004   | 2/19/2010  | 2004-244753        | JP | Automatic Provisioning Of Network Address Translation Data                                                        |
| 82104923     | Granted | 5041805       | 3/25/2004   | 7/20/2012  | 2006-509277        | JP | Quality Of Service Controller And Method For A Data Storage System                                                |
| 82106543     | Granted | 4695143       | 8/30/2005   | 3/4/2011   | 2007-531222        | JP | Scalable, Component-accessible, And Highly Interconnected Three-dimensional Component Arrangement Within A System |
| 82129844     | Granted | 4354023       | 4/2/1998    | 8/7/2009   | H10-089812         | JP | APPARATUS AND METHOD FOR STORAGE SUBSYSTEM DRIVE MOVEMENT AND VOLUME ADDITION                                     |
| 82133321     | Granted | 4596623       | 10/2/2000   | 10/1/2010  | 2000-302020        | JP | DISK STORAGE WITH TRANSPARENT OVERFLOW TO NETWORK STORAGE                                                         |
| 82133591     | Granted | 3779207       | 6/23/2000   | 3/10/2006  | 2001-504714        | JP | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS           |
| 82136264     | Granted | 4294778       | 11/26/1998  | 4/17/2009  | H10-375360         | JP | METHOD FOR ESTIMATING STATISTICS OF PROPERTIES OF INTERACTIONS PROCESSED BY A PROCESSOR PIPELINE                  |
| 82163999     | Granted | 3532358       | 8/29/1996   | 3/12/2004  | H08-228128         | JP | DISTRIBUTED INTERACTIVE MULTIMEDIA SERVICE SYSTEM                                                                 |
| 82165226     | Granted | 2963064       | 12/26/1996  | 8/6/1999   | H08-359878         | JP | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                    |
| 82171151     | Granted | 4809236       | 10/21/2004  | 8/26/2011  | P2006-538145       | JP | Methods And Systems For Dynamically Configuring A Network Component                                               |
| 82171166     | Granted | 5437634       | 7/21/2006   | 12/20/2013 | P2008-535519       | JP | Quantum Information Conversion Between Matter And Light Representations                                           |
| 82174775     | Granted | 4302659       | 4/5/2005    | 5/1/2009   | 2005-108332        | JP | Liquid Loop With Multiple Pump Assembly                                                                           |
| 82178171     | Granted | 4669728       | 4/5/2005    | 1/21/2011  | 2005-108214        | JP | Formatting A Data Storage Medium To A Desired Block Format                                                        |
| 82178525     | Granted | 4038510       | 1/20/2005   | 11/9/2007  | 2005-012195        | JP | Cluster Node Status Detection And Communication                                                                   |
| 82179032     | Granted | 4611322       | 2/17/2005   | 10/22/2010 | 2006-554206        | JP | Airflow Detection System Having An Airflow Indicating Device                                                      |
| 82181783     | Granted | 4404861       | 1/24/2006   | 11/13/2009 | 2006-015058        | JP | Thermally Conductive Cover Directly Attached To Heat Producing Component                                          |
| 82182350     | Granted | 4744290       | 12/22/2005  | 5/20/2011  | 2005-369369        | JP | Spring Adapted To Hold Electronic Device In A Frame                                                               |
| 82183763     | Granted | 5043360       | 4/11/2006   | 7/20/2012  | P2006-108504       | JP | Memory Module With A Predetermined Arrangement Of Pins                                                            |
| 82186220     | Granted | 4695986       | 1/16/2006   | 3/4/2011   | 2006-007661        | JP | Non Unique Fragment Number Identifiers                                                                            |



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| 82187765     | Granted | 4463305       | 8/31/2005   | 2/26/2010  | 2007-528877 JP     |    | COMMUNICATIONS INFRASTRUCTURE FOR CONTENT DELIVERY USING EDGE SERVERS                                                                              |
| 82188641     | Granted | 4638486       | 4/28/2005   | 12/3/2010  | 2007-510972 JP     |    | Non-demolition Photon Detector That Preserves Input Signal Characteristics                                                                         |
| 82189391     | Granted | 5001557       | 1/26/2006   | 5/25/2012  | P2006-017621 JP    |    | Thermal And Power Management Apparatus                                                                                                             |
| 82190318     | Granted | 4286838       | 1/27/2006   | 4/3/2009   | 2006-018652 JP     |    | Information Technology (IT) Equipment Positioning System                                                                                           |
| 82190942     | Granted | 4238233       | 6/14/2005   | 12/26/2008 | 2005-173488 JP     |    | System And Method For Sharing Storage Resources Between Multiple Files                                                                             |
| 82190951     | Granted | 4307461       | 3/28/2006   | 5/15/2009  | 2006-087346 JP     |    | Memory Module With On-board Power-consumption Monitoring                                                                                           |
| 82191761     | Granted | 4615012       | 5/10/2005   | 10/29/2010 | 2007-513322 JP     |    | ARCHITECTURE AND METHODS FOR COMPUTING WITH NANOMETER SCALE RECONFIGURABLE RESISTOR CROSSBAR SWITCHES                                              |
| 82191953     | Granted | 5022417       | 9/11/2009   | 6/22/2012  | P2009-210497 JP    |    | Remote Measurement Of Motion Employing RFID                                                                                                        |
| 82192010     | Granted | 4912731       | 4/19/2006   | 1/27/2012  | P2006-115312 JP    |    | Redundant I/O Interface Management                                                                                                                 |
| 82192019     | Granted | 4195042       | 4/27/2006   | 10/3/2008  | 2006-123083 JP     |    | Remote Detection Employing RFID                                                                                                                    |
| 82196441     | Granted | 4474378       | 4/19/2006   | 3/12/2010  | 2006-115314 JP     |    | Computing With Both Lock-step And Free Step Processor Modes                                                                                        |
| 82196633     | Granted | 4224477       | 7/25/2005   | 11/28/2008 | 2005-213848 JP     |    | Communication Among Partitioned Devices                                                                                                            |
| 82197068     | Granted | 4594985       | 9/13/2005   | 9/24/2010  | 2007-531476 JP     |    | Tests Of Quantum Information                                                                                                                       |
| 82197443     | Granted | 4916162       | 11/21/2005  | 2/3/2012   | P2005-335398 JP    |    | Systems And Methods For A Unified Computer System Fabric                                                                                           |
| 82198007     | Granted | 4185103       | 2/16/2006   | 9/12/2008  | 2006-039467 JP     |    | System And Method For Scheduling Executables                                                                                                       |
| 82200077     | Granted | 4510895       | 10/14/2005  | 5/14/2010  | 2007-538992 JP     |    | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
| 82200686     | Granted | 4679584       | 10/31/2005  | 2/10/2011  | 2007-545470 JP     |    | Routing A Service Query In An Overlay Network                                                                                                      |
| 82201244     | Granted | 5124140       | 9/17/2004   | 11/2/2012  | P2006-527086 JP    |    | Configuration system and method                                                                                                                    |
| 82201871     | Granted | 5068256       | 6/9/2006    | 8/24/2012  | P2008-515985 JP    |    | Fiber-coupled Single Photon Source                                                                                                                 |
| 82204505     | Granted | 4261543       | 12/15/2005  | 2/20/2009  | 2005-361764 JP     |    | System And Method For Replacing An Inoperable Master Workload Management Process                                                                   |
| 82204514     | Granted | 4558661       | 2/20/2006   | 7/30/2010  | 2006-042081 JP     |    | Computer System And Method For Transferring Executables Between Partitions                                                                         |
| 82205867     | Granted | 4588768       | 10/31/2005  | 9/17/2010  | 2007-545468 JP     |    | Determining Highest Workloads For Nodes In An Overlay Network                                                                                      |
| 82205882     | Granted | 4681615       | 12/6/2005   | 2/10/2011  | 2007-545560 JP     |    | Splitting A Workload Of A Node                                                                                                                     |
| 82206251     | Granted | 4505763       | 1/25/2008   | 5/14/2010  | 2008-014976 JP     |    | Managing A Node Cluster                                                                                                                            |
| 82206311     | Granted | 4625664       | 3/9/2006    | 11/12/2010 | 2008-503017 JP     |    | Embedded Web-based Management Method                                                                                                               |
| 82206446     | Granted | 4129959       | 2/1/2005    | 5/30/2008  | 2005-025015 JP     |    | *                                                                                                                                                  |
| 82208684     | Granted | 4199278       | 3/1/2005    | 10/10/2008 | 2006-517882 JP     |    | Packet Relay System And Packet Relay Device                                                                                                        |

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| 82209053     | Granted | 4041518       | 3/10/2005   | 11/16/2007 | 2006-517883        | JP | Server System, Server Device And Method Therefor                                                                                            |
| 82209362     | Granted | 4658657       | 3/28/2005   | 1/7/2011   | 2005-091955        | JP | Storage System, Method For Storing Information In A Storage Device, Method Related Thereto, And Computer Program Product                    |
| 82212494     | Granted | 4489789       | 4/12/2007   | 4/9/2010   | 2007-105034        | JP | Power Management System And Method                                                                                                          |
| 82212683     | Granted | 4925610       | 6/16/2005   | 2/17/2012  | P2005-175922       | JP | Communication System And Its Method                                                                                                         |
| 82214237     | Granted | 4827261       | 9/6/2005    | 9/22/2011  | P2007-534208       | JP | Message Processing Device And Method Thereof                                                                                                |
| 82214609     | Granted | 4871994       | 5/22/2007   | 11/25/2011 | P2009-513177       | JP | Nanoparticle Coupled To Waveguide                                                                                                           |
| 82214738     | Granted | 5096376       | 1/30/2007   | 9/28/2012  | P2008-552500       | JP | Tunneling-resistor-junction-based Microscale/nanscale Demultiplexer Arrays                                                                  |
| 82215476     | Granted | 4694578       | 1/16/2008   | 3/4/2011   | 2008-006416        | JP | Method And System For Protecting A Computer Network Against Packet Floods                                                                   |
| 82215818     | Granted | 4945633       | 4/20/2007   | 3/9/2012   | P2009-507743       | JP | Dynamic Data Navigation                                                                                                                     |
| 82216112     | Granted | 4580020       | 1/30/2007   | 9/3/2010   | 2008-553337        | JP | Methods And Systems For Avoiding Transmission-channel Disruptions                                                                           |
| 82216730     | Granted | 4167260       | 12/27/2005  | 8/8/2008   | 2005-375223        | JP | Apparatus For Information Acquisition And Method Therefor                                                                                   |
| 82217813     | Granted | 4541373       | 3/6/2007    | 7/2/2010   | 2007-055047        | JP | Methods And Systems For Hierarchical Management Of Distributed Data                                                                         |
| 82218056     | Granted | 4773835       | 2/3/2006    | 7/1/2011   | 2006-026839        | JP | Apparatus For Processing Control And Method Therefor                                                                                        |
| 82218242     | Granted | 4516087       | 3/6/2007    | 5/21/2010  | 2007-055048        | JP | Consistency Methods And Systems                                                                                                             |
| 82218440     | Granted | 4343983       | 11/24/2005  | 7/17/2009  | 2007-546323        | JP | Network Adminstrating Device And Method Of Adminstrating Network                                                                            |
| 82219112     | Granted | 4842378       | 7/11/2007   | 10/14/2011 | P2009-521754       | JP | Compact Systems For Generating Polarization-entangled Photons                                                                               |
| 82219235     | Granted | 4864143       | 7/11/2007   | 11/18/2011 | P2009-529170       | JP | Compact, Single-chip-based, Entangled Polarization-state Photon Sources And Methods For Generating Photons In Entangled Polarization States |
| 82223852     | Granted | 1304272       | 8/9/2006    | 5/25/2007  | 2006-021132        | JP | Movable Gate For Reading RF IC Tags                                                                                                         |
| 82223930     | Granted | 5059130       | 2/28/2008   | 8/10/2012  | 2009-551736        | JP | Hetero-crystalline Semiconductor Device And Method Of Making Same                                                                           |
| 82224347     | Granted | 4987744       | 1/30/2008   | 5/11/2012  | P2008-018511       | JP | SOFTWARE LICENSE AGREEMENT MANAGEMENT BASED ON TEMPORARY USAGE                                                                              |
| 82225667     | Granted | 5026508       | 4/20/2007   | 6/29/2012  | P2009-506626       | JP | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                                         |
| 82226048     | Granted | 5357752       | 3/28/2008   | 9/6/2013   | P2009-509213       | JP | Data Transmission System And Method                                                                                                         |
| 82226603     | Granted | 5258877       | 4/25/2008   | 5/2/2013   | 2010-506282        | JP | Active Control Of Time-varying Spatial Temperature Distribution                                                                             |
| 82229351     | Granted | 4926120       | 4/24/2008   | 2/17/2012  | P2008-113735       | JP | Data Processing System And Method                                                                                                           |
| 82229666     | Granted | 4792065       | 7/7/2008    | 7/29/2011  | 2008-176597        | JP | Storing Data                                                                                                                                |

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| 82229798     | Granted   | 5255348       | 7/7/2008    | 4/26/2013  | P2008-176598 JP    |    | Memory Allocation For Crash Dump                                                                      |
| 82230536     | Granted   | 5079086       | 6/4/2008    | 9/7/2012   | P2010-512153 JP    |    | OPTICAL INTERCONNECT                                                                                  |
| 82230671     | Granted   | 4740979       | 5/16/2008   | 5/13/2011  | 2008-129128 JP     |    | A Method And A System To Determine Device Criticality During SAN Reconfigurations                     |
| 82233155     | Granted   | 5138050       | 2/20/2008   | 11/22/2012 | P2010-547602 JP    |    | Redriver With Two Reference Clocks And Method Of Operation Thereof                                    |
| 82234544     | Granted   | 5133414       | 7/16/2008   | 11/16/2012 | P2010-518196 JP    |    | Free Space WDM Signal Detector                                                                        |
| 82234610     | Granted   | 4920787       | 10/15/2008  | 2/10/2012  | 2010-529949 JP     |    | METHOD AND SYSTEM OF TRACKING OPTICAL BEAM SHIFTS                                                     |
| 82234673     | Granted   | 5373782       | 6/25/2008   | 9/27/2013  | 2010-514803 JP     |    | Nanowire Photodiodes And Methods Of Making Nanowire Photodiodes                                       |
| 82235168     | Granted   | 5222950       | 10/15/2008  | 3/15/2013  | 2010-529941 JP     |    | PLASMONIC HIGH-SPEED DEVICES FOR ENHANCING THE PERFORMANCE OF MICROELECTRONIC DEVICES                 |
| 82235225     | Granted   | 4907603       | 6/20/2008   | 1/20/2012  | P2008-161206 JP    |    | Access Control System And Method                                                                      |
| 82236704     | Granted   | 5055252       | 12/2/2008   | 8/3/2012   | P2008-307361 JP    |    | Data Processing Method And System                                                                     |
| 82237952     | Granted   | 5376496       | 10/24/2008  | 10/4/2013  | P2008-274368 JP    |    | Dynamic Allocation Of Virtual Machine Devices                                                         |
| 82238021     | Granted   | 4249622       | 9/20/2002   | 1/23/2009  | 2003-531367 JP     |    | A SYSTEM AND METHOD FOR EFFICIENT LOCK RECOVERY                                                       |
| 82238333     | Granted   | 5159897       | 1/31/2008   | 12/21/2012 | P2010-544948 JP    |    | OPTICAL TAPS FOR CIRCUIT BOARD-MOUNTED OPTICAL WAVEGUIDES                                             |
| 82239101     | Granted   | 5230797       | 4/2/2008    | 3/29/2013  | 2011-502919 JP     |    | Disk Drive Data Encryption                                                                            |
| 82241468     | Granted   | 5182771       | 4/2/2008    | 1/25/2013  | 2011-502918 JP     |    | Converting Resets In Shared I/O System                                                                |
| 82241603     | Granted   | 5108975       | 4/28/2008   | 10/12/2012 | P2011-506240 JP    |    | Virtual-interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                        |
| 82241891     | Granted   | 5366982       | 3/4/2008    | 9/20/2013  | P2010-549622 JP    |    | ANGLE SENSOR, SYSTEM AND METHOD EMPLOYING GUIDED-MODE RESONANCE                                       |
| 82242218     | Granted   | 5178910       | 3/28/2008   | 1/18/2013  | P2011-501770 JP    |    | FLEXIBLE OPTICAL INTERCONNECT                                                                         |
| 82242578     | Granted   | 5357903       | 3/11/2008   | 9/6/2013   | P2010-550643 JP    |    | Optoelectronic Switches Using On-chip Optical Waveguides                                              |
| 82242656     | Granted   | 5199455       | 4/4/2008    | 2/15/2013  | P2011-502907 JP    |    | BEAMSPLITTERS WITH OFFSET COMPENSATION                                                                |
| 82242713     | Published |               | 5/1/2008    |            | P2011-507392 JP    |    | Storing Checkpoint Data In Non-volatile Memory                                                        |
| 82245008     | Granted   | 5179654       | 5/6/2008    | 1/18/2013  | 2011-508460 JP     |    | SYSTEM AND METHOD FOR MICRO RING LASER ARRAYS, SYSTEM AND METHOD FOR BI-DIRECTIONAL DATA TRANSMISSION |
| 82245326     | Granted   | 5155444       | 5/7/2008    | 12/14/2012 | 2011-508463 JP     |    | Neuromorphic Circuit                                                                                  |
| 82247456     | Granted   | 5154666       | 9/29/2008   | 12/14/2012 | 2010-550652 JP     |    | System And Method For Selectively Defining Access To Application Features                             |
| 82251950     | Granted   | 4571746       | 7/15/1999   | 8/20/2010  | 2000-560497 JP     |    | Method and System for Presenting Non-Transaction Message on an ATM Terminal                           |
| 82252091     | Granted   | 5043255       | 4/19/2000   | 41110      | P2000-614176 JP    |    | System And Method For Reporting XML Data From A Legacy Computer System                                |
| 82253132     | Granted   | 4495895       | 3/7/2001    | 4/16/2010  | 2001-565042 JP     |    | Optical Polymorphic Computer Systems                                                                  |
| 82405415     | Granted   | 5186592       | 5/8/2008    | 1/25/2013  | 2011-508455 JP     |    | Optical Splitter Device                                                                               |
| 82405423     | Granted   | 5309212       | 5/9/2008    | 7/5/2013   | 2011-508471 JP     |    |                                                                                                       |

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| 82405547     | Granted | 5118771       | 5/9/2008    | 10/26/2012 | 2011-508457 JP     |    | Proximity Free Space Optical Interconnect                                                                              |
| 82554385     | Granted | 5118772       | 5/23/2008   | 10/26/2012 | 2011-510478 JP     |    | Optical Interconnect                                                                                                   |
| 82579303     | Granted | 5038888       | 5/4/2005    | 7/13/2012  | JP20070511653 JP   |    | Pattern Discovery In A Network Security System                                                                         |
| 82579372     | Granted | 5191492       | 10/25/2007  | 2/8/2013   | 2009534869 JP      |    | Tracking Changing State Data To Assist In Computer Network Security                                                    |
| 82579391     | Granted | 5417179       | 10/25/2007  | 11/22/2013 | 2009534870 JP      |    | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security       |
| 82581169     | Granted | 4789933       | 5/12/2005   | 7/29/2011  | 2007-515157 JP     |    | APPARATUS AND METHOD FOR DEVELOPING, TESTING AND MONITORING SECURE SOFTWARE                                            |
| 82595705     | Granted | 5474065       | 7/31/2008   | 2/14/2014  | 2011-521082 JP     |    | Nano-wire Optical Block Devices For Amplifying, Modulating, And Detecting Optical Signals                              |
| 82621137     | Granted | 5231642       | 8/8/2008    | 3/29/2013  | 2011-522033 JP     |    | Independently Controlled Virtual Memory Devices In Memory Modules                                                      |
| 82631631     | Granted | 5475776       | 7/31/2008   | 2/14/2014  | 2011-521068 JP     |    | Multi-layer Reconfigurable Switches                                                                                    |
| 82634148     | Granted | 5325299       | 8/26/2008   | 7/26/2013  | 2011-523785 JP     |    | Tunable Nanowire Resonant Cavity For Optical Modulation                                                                |
| 82651102     | Granted | 5425912       | 9/30/2008   | 12/6/2013  | 2011-529000 JP     |    | Authentication Of Services On A Partition                                                                              |
| 82651136     | Granted | 5567580       | 9/23/2009   | 6/27/2014  | 2011-534565 JP     |    | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                                                             |
| 82653590     | Granted | 5235036       | 9/22/2009   | 4/5/2013   | 2011-534564 JP     |    | DIFFERENTIAL ON-LINE TERMINATION                                                                                       |
| 82653941     | Granted | 5352683       | 1/30/2009   | 8/30/2013  | 2011-547900 JP     |    | SYSTEM AND METHOD FOR INTEGRATING CAPACITY PLANNING AND WORKLOAD MANAGEMENT                                            |
| 82654456     | Granted | 5376544       | 9/4/2008    | 10/4/2013  | P2011-526021 JP    |    | Dielectric Waveguide Intersection With Reduced Losses                                                                  |
| 82672078     | Granted | 5255703       | 10/8/2008   | 4/26/2013  | P2011-531005 JP    |    | Firmware Storage Medium With Customized Image                                                                          |
| 82678335     | Granted | 5645837       | 10/29/2008  | 11/14/2014 | 2011-534468 JP     |    | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein                                |
| 82692035     | Granted | 5324660       | 10/31/2008  | 7/26/2013  | 2011-534463 JP     |    | Prioritized Optical Arbitration Systems And Methods                                                                    |
| 82716523     | Granted | 5426684       | 10/30/2008  | 12/6/2013  | P2011-534471 JP    |    | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                                                   |
| 82716635     | Granted | 5199479       | 10/31/2008  | 2/15/2013  | 2011-534461 JP     |    | Variably Configurable Computer Buses                                                                                   |
| 82716701     | Granted | 5373919       | 10/31/2008  | 9/27/2013  | 2011-534477 JP     |    | Optical Connector Interconnection System And Method                                                                    |
| 82774439     | Granted | 5639598       | 1/7/2009    | 10/31/2014 | 2011-545334 JP     |    | PHOTONIC WAVEGUIDE                                                                                                     |
| 82779966     | Granted | 5579667       | 6/9/2006    | 7/18/2014  | 2011-148449 JP     |    | OPTICALLY COUPLED INTEGRATED CIRCUIT LAYERS                                                                            |
| 82790077     | Granted | 5710499       | 1/9/2009    | 3/13/2015  | 2011-545338 JP     |    | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                                       |
| 82805245     | Granted | 5683493       | 1/30/2009   | 1/23/2015  | 2011-547901 JP     |    | PLASMONIC LIGHT EMITTING DIODE                                                                                         |
| 82811451     | Granted | 5539397       | 1/29/2009   | 5/9/2014   | 2011-547896 JP     |    | CONNECTING PORTS OF ONE OR MORE ELECTRONIC DEVICES TO DIFFERENT SUBSETS OF NETWORKS BASED ON DIFFERENT OPERATING MODES |
| 82853028     | Granted | 5178960       | 3/25/2009   | 1/18/2013  | P2012-501974 JP    |    | POWER DISTRIBUTION UNIT-DEVICE CORRELATION                                                                             |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------|
| 82879823     | Granted     | 5414006       | 10/26/2009  | 11/22/2013 | 2012-508912 JP     |    | Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same |
| 82891943     | Granted     | 5414007       | 10/26/2009  | 11/22/2013 | 2012-518764 JP     |    | Quantum Repeater And System And Method For Creating Extended Entanglements              |
| 82904517     | Application |               | 7/31/2009   |            | 2012-522789 JP     |    | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                      |
| 82929796     | Granted     | 5607175       | 3/7/2011    | 9/5/2014   | 2012-542249 JP     |    | DATA STORAGE APPARATUS AND METHODS                                                      |
| 82931419     | Published   |               | 1/29/2010   |            | 2012-551137 JP     |    | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER ARRAYS                                 |
| 83167832     | Granted     | 2013533829    | 10/16/2010  | 10/31/2014 | 2013-533829 JP     |    | DEVICE HARDWARE AGENT                                                                   |
| 83185321     | Granted     | 5269400       | 12/17/1998  | 5/17/2013  | 2007-308749 JP     |    | Tape Leader Pin Assembly And Method For Making The Same                                 |
| 83209017     | Granted     | 5529352       | 11/1/2010   | 4/25/2014  | 2013-534887 JP     |    | STORAGE ELEMENT READING USING RING OSCILLATOR                                           |
| 83215488     | Published   |               | 9/27/2010   |            | 2013-530125 JP     |    | DEVICE STRUCTURE FOR LONG ENDURANCE MEMRISTORS                                          |
| 83242135     | Published   |               | 10/29/2010  |            | 2013-536579 JP     |    | OPTICAL INTERCONNECT FABRICS IMPLEMENTED WITH STAR COUPLERS                             |
| 83255611     | Published   |               | 1/27/2011   |            | 2013-551947 JP     |    | ELECTRONIC BOOK WITH CHANGEABLE PATHS                                                   |
| 83266109     | Published   |               | 12/20/2010  |            | 2013-543149 JP     |    | VERTICAL-CAVITY SURFACE-EMITTING LASER SYSTEM AND METHOD FOR FABRICATING THE SAME       |
| 83566663     | Application |               | 8/25/2011   |            | 2014-527133 JP     |    | Model-based stereoscopic and multiview cross-talk reduction                             |
| 83680960     | Application |               | 4/6/2011    |            | P2014-503636 JP    |    | IDENTIFYING SIMILARITY                                                                  |
| 83721327     | Published   |               | 5/31/2011   |            | 2014-513483 JP     |    | AUTOMATED SECURITY TESTING                                                              |
| 83776065     | Granted     | 5710075       | 7/29/2011   | 42076      | 2014-522804 JP     |    | CREDENTIAL VALIDATION                                                                   |
| 83933610     | Published   |               | 10/31/2011  |            | 2014-539911 JP     |    | EMAIL TAGS                                                                              |
| 83991629     | Published   |               | 2/27/2012   |            | 2014-552176 JP     |    | METHOD AND SYSTEM FOR VEHICLE PERSONALIZATION                                           |
| 84050569     | Published   |               | 3/30/2012   |            | 2015-503173 JP     |    | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE FOR A VIOLATION OF THE PERIMETER      |
| 84076351     | Published   |               | 6/25/2012   |            | 2015-506949 JP     |    | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                              |
| 84078890     | Published   |               | 6/8/2012    |            | 2015-510243 JP     |    | PATIENT INFORMATION INTERFACE                                                           |
| 84106255     | Published   |               | 5/24/2012   |            | 2015-513986 JP     |    | Fiber Connector Assembly                                                                |
| 84106358     | Published   |               | 6/27/2012   |            | 2015-513987 JP     |    | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                                             |
| 84136975     | Application |               | 7/31/2012   |            | 2015-524236 JP     |    | NETWORK TRAFFIC PROCESSING SYSTEM                                                       |
| 84192578     | Application |               | 9/28/2012   |            | 2015-534447 JP     |    | COOLING ASSEMBLY                                                                        |
| 84208491     | Application |               | 9/30/2012   |            | 2015-534449 JP     |    | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                   |

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| 84237777     | Application  |               | 10/31/2012  |            | 2015-540645        | JP | Patient oriented hospital care approach and system                                                         |
| 84241560     | Application  |               | 12/7/2012   |            |                    | JP | NETWORK RESOURCE MANAGEMENT                                                                                |
| 84292925     | Application  |               | 1/31/2013   |            |                    | JP | LIQUID COOLING                                                                                             |
| 84292950     | Application  |               | 1/31/2013   |            |                    | JP | RAM REFRESH RATE                                                                                           |
| 90022721     | Application  |               | 3/27/2013   |            |                    | JP | Non-Volatile Memory Based Synchronous Logic                                                                |
| 90025973     | Application  |               | 3/28/2013   |            |                    | JP | Shared Memory System                                                                                       |
| 90045005     | Acknowledged |               |             |            |                    | JP | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER ARRAYS                                                    |
| 90046364     | Application  |               | 3/14/2013   |            |                    | JP | SUPPORT MEMBER                                                                                             |
| 82236764     | Granted      | 5000456       | 10/31/2007  | 41054      | P2007-282914       | JP | System For Resource Management And Method Therefor                                                         |
| 82220714     | Granted      | 4848182       | 12/21/2005  | 40837      | P2005-367863       | JP | Power Supply System                                                                                        |
| 83984208     | Published    |               | 1/6/2012    |            | 2014-551226        | JP | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION |
| 90016082     | Application  |               | 1/30/2013   |            |                    | JP | UNIFIED CONTROL OF AN ELECTRONIC CONTROL SYSTEM AND A FACILITY CONTROL SYSTEM                              |
| 82100594     | Granted      | 4033856       | 11/8/2004   | 39388      | 2004-323479        | JP | System And Method For Dynamically Varying A Clock Signal                                                   |
| 82119890     | Granted      | 4771615       | 6/1/2001    | 40725      | 2001-166124        | JP | ARCHITECTURE FOR PARALLEL DISTRIBUTED TABLE DRIVEN I/O MAPPING                                             |
| 82176704     | Granted      | 4634812       | 38378       | 40508      | 2005-018280        | JP | Storage System With Capability To Allocate Virtual Storage Segment Among Multiple Controllers              |
| 82194992     | Granted      | 4435831       | 5/13/2005   | 40186      | 2007-513362        | JP | Providing An Alternative Caching Scheme At The Storage Area Network Level                                  |
| 82212977     | Granted      | 4768497       | 4/10/2006   | 40718      | 2006-107628        | JP | Migrating Data In A Storage System                                                                         |
| 82218593     | Granted      | 4726852       | 4/25/2007   | 40655      | 2007-115272        | JP | Compatibility Enforcement In Clustered Computing Systems                                                   |
| 82241447     | Granted      | 4959004       | 2/18/2008   | 3/30/2012  | 2010-546744        | JP | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device            |
| 82266353     | Granted      | 3737517       | 10/11/1996  | 11/4/2005  | H09-515258         | JP | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS     |
| 82065569     | Granted      | 4579492       | 12/24/2002  | 9/3/2010   | 2002-371864        | JP | System And Method For Securing Drive Access To Data Storage Media Based On Medium Identifiers              |
| 82175891     | Granted      | 4336639       | 11/1/2004   | 7/3/2009   | 2004-317695        | JP | Tape Cartridge                                                                                             |
| 84253410     | Application  |               | 6/25/2015   |            |                    | JP | MAGNETIC TAPE PROCESSING                                                                                   |
| 82241759     | Granted      | 5069357       | 11/13/2008  | 8/24/2012  | 2010-535007        | JP | AUTOMATED RE-ORDERING OF COLUMNS FOR ALIGNMENT TRAP REDUCTION                                              |
| 82581180     | Granted      | 4997242       | 8/25/2006   | 5/18/2012  | JP2008528245       | JP | Apparatus and method for analyzing and supplementing a program to provide security                         |
| 83714213     | Granted      | 5801953       | 5/31/2011   | 9/4/2015   | 2014-511332        | JP | APPLICATION SECURITY TESTING                                                                               |
| 84162679     | Application  |               | 8/29/2012   |            | 2015-529767        | JP | SECURITY SCAN BASED ON DYNAMIC TAINT                                                                       |

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| 82070942     | Granted   | 4498670       | 10/30/2002  | 4/23/2010  | 2002-315361        | JP | Date Processing System And Method                                                                                                     |
| 82183508     | Granted   | 4137877       | 12/7/2004   | 39612      | 2004-353755        | JP | Avoiding Name Collision For The ACPI Control Methods                                                                                  |
| 82093355     | Granted   | 4387174       | 12/11/2003  | 10/9/2009  | 2003-413411        | JP | Systems And Methods For Facilitating Fair And Efficient Scheduling Of Processes Among Multiple Resources In A Computer System         |
| 82098353     | Granted   | 3978199       | 6/28/2004   | 6/29/2007  | 2004-189310        | JP | Systems And Methods For Monitoring Resource Utilization And Application Performance                                                   |
| 82201112     | Granted   | 4386449       | 1/25/2006   | 10/9/2009  | 2006-016023        | JP | METHOD AND SYSTEM OF ALIGNING EXECUTION POINTS TO DUPLICATE COPY OF USER PROGRAM BY EXCHANGING INFORMATION ABOUT INSTRUCTION EXECUTED |
| 81993530     | Granted   | 4097436       | 2/22/2002   | 39528      | 2002-045800        | JP | Redundant Controller Data Storage System Having An On-line Controller Removal System And Method                                       |
| 82135118     | Granted   | 4275771       | 6/26/1998   | 3/13/2009  | H10-180201         | JP | MIRRORED WRITE-BACK CACHE MODULE WARMSWAP                                                                                             |
| 82068635     | Granted   | 4518672       | 8/6/1999    | 5/28/2010  | 2000-564129        | JP | System For Improved Data Backup And Recovery                                                                                          |
| 84164259     | Published |               | 9/19/2012   |            | 2015-527437        | JP | METADATA TREE OF A PATIENT WITH LOCKBOXES                                                                                             |
| 82069628     | Granted   | 4865177       | 9/19/2000   | 11/18/2011 | P2001-530670       | JP | Operation Of Trusted State In Computing Program                                                                                       |
| 82086047     | Granted   | 5068251       | 4/25/2006   | 8/24/2012  | P2008-509102       | JP | Three-dimensional Nanoscale Crossbars                                                                                                 |
| 82186004     | Granted   | 5047184       | 11/1/2006   | 7/27/2012  | P2008-539049       | JP | Crossbar-Array Designs and Wire Addressing Methods That Tolerate Misalignment Of Electrical Components at Wire Overlap Points         |
| 82223528     | Granted   | 5118746       | 4/18/2008   | 10/26/2012 | 2010-504111        | JP | Computational Nodes And Computational-node Networks That Include Dynamical-nanodevice Connections                                     |
| 82743455     | Granted   | 4707295       | 7/10/2000   | 3/25/2011  | 2001-543738        | JP | Electrically Addressable Volatile Non-volatile Molecular-based Switching Devices                                                      |
| 83140423     | Granted   | 5575866       | 10/3/2007   | 7/11/2014  | 2012-270961        | JP | Electrically Actuated Switch                                                                                                          |
| 82080056     | Granted   | 4002890       | 1/15/2003   | 8/24/2007  | 2003-560796        | JP | A Method For Searching Nodes For Information                                                                                          |
| 82096292     | Granted   | 4870549       | 2/11/2004   | 40872      | P2006-503439       | JP | Quantum Information Processing Using Electromagnetically Induced Transparency                                                         |
| 82174142     | Granted   | 5068162       | 4/28/2005   | 8/24/2012  | P2007-510997       | JP | Quantum Optical State Converter                                                                                                       |
| 82208354     | Granted   | 5026416       | 6/21/2006   | 6/29/2012  | P2008-518456       | JP | Integrated Circuit Device Having Optically Coupled Layers                                                                             |
| 82233449     | Granted   | 5086440       | 10/15/2008  | 9/14/2012  | 2010-529947        | JP | OPTICAL INTERCONNECT SYSTEM PROVIDING COMMUNICATION BETWEEN COMPUTER SYSTEM COMPONENTS                                                |
| 82235012     | Granted   | 5154652       | 10/23/2008  | 12/14/2012 | 2010-531046        | JP | Three-dimensional Die Stacks With Inter-device And Intra-device Optical Interconnect                                                  |
| 82247624     | Granted   | 5231632       | 4/29/2009   | 3/29/2013  | 2011-508554        | JP | OPTICAL WAVEGUIDES AND METHODS OF MAKING THE SAME                                                                                     |
| 82595684     | Granted   | 5438107       | 7/25/2008   | 12/20/2013 | 2011-520011        | JP | Light-emitting Devices                                                                                                                |
| 82716717     | Granted   | 5231651       | 10/31/2008  | 3/29/2013  | 2011-534460        | JP | Optical Broadcast With Buses With Shared Optical Interfaces                                                                           |

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| 82790056     | Granted      | 5269206       | 1/9/2009    | 5/17/2013  | 2011-545339        | JP | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                         |
| 83235817     | Granted      | 5777722       | 10/29/2010  | 7/17/2015  | 2013-536577        | JP | SMALL-MODE-VOLUME, VERTICAL-CAVITY, SURFACE-EMITTING LASER                                                                        |
| 84141096     | Application  |               | 9/10/2012   |            | 2015-525410        | JP | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                                                    |
| 83784117     | Published    |               | 10/20/2011  |            | 2014-529695        | JP | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS BASED ON A REFERENCE BASELINE ACCORDING TO TEMPORAL POSITION IN A SEQUENCE OF EVENTS |
| 84022147     | Published    |               | 2/22/2012   |            | 2014-558716        | JP | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM ON A COMPUTER                                                                  |
| 84290791     | Application  |               | 1/30/2013   |            |                    | JP | NON-VOLATILE MEMORY WRITE MECHANISM                                                                                               |
| 90022823     | Application  |               | 7/31/2015   |            |                    | JP | DETERMINING TRANSFERABILITY OF A COMPUTING RESOURCE TO A CLOUD COMPUTING ENVIRONMENT                                              |
| 90065900     | Application  |               | 3/28/2013   |            |                    | JP | SHIELD FOR AN ELECTRONIC DEVICE                                                                                                   |
| 82238198     | Granted      | 5376538       | 12/21/2007  | 10/4/2013  | 2010-539407        | JP | Moisture Content Control System                                                                                                   |
| 82728101     | Granted      | 5654480       | 12/19/2008  | 11/28/2014 | 2011-542097        | JP | Redundant Data Storage For Uniform Read Latency                                                                                   |
| 82067753     | Granted      | 4397456       | 5/12/1999   | 40116      | H11-131184         | JP | Read After Write                                                                                                                  |
| 82180505     | Granted      | 4576399       | 4/19/2007   | 40417      | 2007-110164        | JP | System And Method For Clearing Information In A Stalled Output Queue Of A Crossbar                                                |
| 82183499     | Granted      | 4312754       | 12/12/2005  | 39955      | 2005-357348        | JP | Component For Impedance Matching                                                                                                  |
| 82222643     | Granted      | 4971943       | 10/22/2007  | 41012      | P2007-273286       | JP | Non-volatile Storage                                                                                                              |
| 90056379     | Acknowledged |               | 4/3/2013    |            |                    | JP | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                                       |
| 82052582     | Granted      | 4922496       | 3/16/2001   | 40949      | P2001-075172       | JP | Improving Host I/O Performance And Availability Of A Storage Array During Rebuild By Prioritizing I/O Requests                    |
| 82099403     | Granted      | 4342452       | 1/26/2005   | 7/17/2009  | 2005-017681        | JP | Transaction-based Storage Operations                                                                                              |
| 82217651     | Granted      | 4668970       | 10/29/2007  | 1/21/2011  | 2007-279763        | JP | Detection And Correction Of Block-level Data Corruption In Fault-tolerant Data-storage Systems                                    |
| 81994955     | Granted      | 4925559       | 11/17/2003  | 2/17/2012  | P2003-386822       | JP | Transmission Node, Reception Node and Network System                                                                              |
| 82209842     | Granted      | 4167238       | 3/11/2005   | 8/8/2008   | 2005-068670        | JP | *                                                                                                                                 |
| 82253546     | Granted      | 4864289       | 12/6/2002   | 11/18/2011 | P2003-551963       | JP | Network User Authentication System And Method                                                                                     |
| 84182121     | Application  |               | 9/28/2012   |            | 2015-534445        | JP | Application Security Testing                                                                                                      |
| 82580856     | Granted      | 5148607       | 6/29/2007   | 41250      | JP2009518568       | JP | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                                                                |
| 81971855     | Granted      | 5137281       | 6/25/2001   | 11/22/2012 | P2001-190601       | JP | Demand Responsive Method And Apparatus To Automatically Activate Spare Servers                                                    |
| 82191926     | Granted      | 4177833       | 4/11/2005   | 8/29/2008  | 2005-113248        | JP | Method And Apparatus For Multi-process Access To A Linked-list                                                                    |
| 82195364     | Granted      | 4971673       | 4/26/2006   | 4/13/2012  | P2006-121629       | JP | Memory Mapped Page Priorities                                                                                                     |
| 82200854     | Granted      | 4749431       | 3/4/2005    | 5/27/2011  | 2007-557672        | JP | A Method And Apparatus For Facilitating Pipeline Throughput                                                                       |

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| 82223015     | Granted     | 4641546       | 1/23/2008   | 12/10/2010 | 2008-012640 JP     |    | Method And System For Handling Input/output (I/O) Errors                                                                 |
| 82224080     | Granted     | 4726915       | 1/23/2008   | 4/22/2011  | 2008-012641 JP     |    | Method And System For Determining Device Criticality In A Computer Configuration                                         |
| 82228448     | Granted     | 4907605       | 6/24/2008   | 40928      | P2008-163998 JP    |    | A Method And A Computer Program For Inode Allocation And De-allocation                                                   |
| 84074289     | Published   |               | 5/30/2012   |            | 2015-508929 JP     |    | SERVER PROFILE TEMPLATES                                                                                                 |
| 81968168     | Granted     | 3947381       | 10/19/2001  | 4/20/2007  | 2001-321305 JP     |    | Method And Apparatus For Processing Unit Synchronization For Scalable Parallel Processing                                |
| 82007006     | Granted     | 4771654       | 11/10/2003  | 7/1/2011   | 2003-379250 JP     |    | Mapping Addresses To Memory Banks Based On At Least One Mathematical Relationship                                        |
| 84301957     | Application |               | 3/28/2013   |            | JP                 |    | APPARATUS AND METHOD FOR STORAGE DEVICE READING                                                                          |
| 82209224     | Granted     | 4023748       | 3/11/2005   | 10/12/2007 | 2005-068669 JP     |    | Apparatus For Data Creation And Method Therefor                                                                          |
| 82253174     | Granted     | 4570325       | 10/11/2001  | 8/20/2010  | 2002-538341 JP     |    | Method And System For Organizing Vendor Information                                                                      |
| 83728685     | Published   |               | 6/16/2011   |            | 2014-514445 JP     |    | System and Method for Policy Generation                                                                                  |
| 82201541     | Granted     | 4769860       | 4/19/2006   | 6/24/2011  | 2008-507874 JP     |    | Multiplexer Interface To A Nanoscale-crossbar                                                                            |
| 82214711     | Granted     | 5086359       | 10/16/2007  | 41166      | P2009-533343 JP    |    | CROSSBAR-MEMORY SYSTEMS AND METHODS FOR WRITING TO AND READING FROM CROSSBAR MEMORY JUNCTIONS OF CROSSBAR-MEMORY SYSTEMS |
|              |             |               |             |            |                    |    | NANOSCALE SWITCHING DEVICE                                                                                               |
| 83215473     | Granted     | 5721839       | 9/16/2010   | 4/3/2015   | 2013-529114 JP     |    | Method and Circuit for Switching a Memristive Device                                                                     |
| 83255745     | Granted     | 5619296       | 1/31/2011   | 9/26/2014  | 2013-539821 JP     |    | Photonic Interconnect System                                                                                             |
| 82175507     | Granted     | 4447606       | 10/6/2004   | 40207      | 2006-534342 JP     |    | Nonlinear Electromagnetic Quantum Information Processing                                                                 |
| 82181498     | Granted     | 4684294       | 6/28/2005   | 2/18/2011  | 2007-523571 JP     |    |                                                                                                                          |
| 82198418     | Granted     | 4699477       | 11/18/2005  | 3/11/2011  | 2007-543280 JP     |    | Composite Material With Controllable Resonant Cells                                                                      |
| 82207409     | Granted     | 4829971       | 7/21/2006   | 40808      | P2008-532217 JP    |    | Method And Apparatus For Electromagnetic Resonance Using Negative Index Material                                         |
| 82226639     | Granted     | 5501768       | 1/31/2008   | 3/20/2014  | 2009-548299 JP     |    | Electronic And Optical Circuit Integration Through Wafer Bonding                                                         |
| 82230323     | Granted     | 5096573       | 6/25/2008   | 9/28/2012  | P2010-514804 JP    |    | Micro-electro-mechanical Systems And Photonic Interconnects Employing The Same                                           |
| 82230572     | Granted     | 5286359       | 7/16/2008   | 6/7/2013   | P2010-517013 JP    |    | Optical Device Including Waveguide Grating Structure                                                                     |
| 82230632     | Granted     | 4981126       | 4/20/2007   | 4/27/2012  | P2009-506613 JP    |    | Self-authenticating Quantum Random Bit Generators                                                                        |
| 82238315     | Granted     | 5302339       | 1/31/2008   | 6/28/2013  | P2010-544950 JP    |    | MEMS-BASED PELLICLE BEAMSPLITTER                                                                                         |
| 82239500     | Granted     | 5205473       | 1/31/2008   | 2/22/2013  | P2010-544932 JP    |    | FREE SPACE OPTICAL INTERCONNECT                                                                                          |
| 82240127     | Granted     | 5280455       | 10/23/2008  | 5/31/2013  | 2010-531048 JP     |    | Three-dimensional Memory Module Architectures                                                                            |
| 82243367     | Granted     | 5133424       | 10/23/2008  | 11/16/2012 | 2010-531044 JP     |    | Photonic Interconnects For Computer System Devices                                                                       |
| 82405608     | Granted     | 5309211       | 5/8/2008    | 7/5/2013   | 2011-508468 JP     |    | Hierarchical Passive Networks                                                                                            |
| 82716668     | Granted     | 5502880       | 10/31/2008  | 3/20/2014  | 2011-534476 JP     |    | Device For Optically Coupling Photonic Elements                                                                          |
| 82901674     | Granted     | 5364776       | 4/3/2007    | 9/13/2013  | 2011-258371 JP     |    | Merging Multiple Log Entries In Accordance With Merge Properties And Mapping Properties                                  |

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| 84191744     | Application |               | 9/25/2012   |            | 2015-533032        | JP | NOTIFICATION OF ADDRESS RANGE INCLUDING NON-CORRECTABLE ERROR                                                               |
| 84292966     | Application |               | 1/31/2013   |            |                    | JP | UPDATING A COMMIT LIST TO INDICATE DATA TO BE WRITTEN TO A FIRMWARE INTERFACE VARIABLE REPOSITORY                           |
| 90051530     | Application |               | 3/28/2013   |            |                    | JP | IDENTIFYING MEMORY OF A BLADE DEVICE FOR USE BY OPERATING SYSTEM OF A PARTITION INCLUDING THE BLADE DEVICE                  |
| 82095035     | Granted     | 4128986       | 9/2/2004    | 5/23/2008  | 2004-255317        | JP | Self-contained Spray Cooling Module                                                                                         |
| 82170578     | Granted     | 4639192       | 5/28/2004   | 12/3/2010  | 2006-533516        | JP | Air Re-circulation Index                                                                                                    |
| 82191365     | Granted     | 4979584       | 10/5/2005   | 4/27/2012  | P2007-535841       | JP | Method Of Providing Storage To Virtual Computer Cluster Within Shared Computing Environment                                 |
| 82223393     | Granted     | 5006930       | 7/11/2007   | 6/1/2012   | P2009-519522       | JP | Defect-and-failure-tolerant Demultiplexer Using Series Replication And Error-control Encoding                               |
| 82240373     | Granted     | 5467100       | 4/14/2008   | 1/31/2014  | 2011-503958        | JP | Fan For Computer Element In The Service Position                                                                            |
| 82042208     | Granted     | 3612003       | 5/26/2000   | 38289      | 2000-156251        | JP | MODULE TYPE DATA STORAGE SYSTEM                                                                                             |
| 82068305     | Granted     | 4398589       | 4/1/1998    | 40116      | 2000-541687        | JP | AFN Append Point                                                                                                            |
| 84104751     | Published   |               | 8/17/2012   |            | 2015-512614        | JP | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY |
| 84262635     | Application |               | 1/30/2013   |            |                    | JP | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM                              |
| 82000379     | Granted     | 4130751       | 7/23/2002   | 5/30/2008  | 2002-213486        | JP | Dual Switching Reference Voltages                                                                                           |
| 82103642     | Granted     | 4388127       | 12/17/2004  | 10/9/2009  | 2008-185774        | JP | Method And Apparatus For Reducing Soft Errors                                                                               |
| 82221263     | Granted     | 4836915       | 10/11/2007  | 10/7/2011  | P2007-265310       | JP | Address Handling                                                                                                            |
| 82233752     | Granted     | 5002055       | 5/21/2008   | 5/25/2012  | 2010-518168        | JP | TAMPER-EVIDENT CONNECTOR                                                                                                    |
| 82102145     | Granted     | 4378308       | 3/24/2005   | 9/18/2009  | 2005-085401        | JP | Bus Configuration Multiplexer                                                                                               |
| 84184516     | Application |               | 9/27/2012   |            | 2015-533033        | JP | TRANSMIT SPECIFIC TRAFFIC ALONG BLOCKED LINK                                                                                |
| 82028282     | Granted     | 4410869       | 3/8/1999    | 40137      | H11-059665         | JP | Linear Speed Measurement Independent Of Lateral Position In Linear Tape Systems                                             |
| 82065560     | Granted     | 4716478       | 12/19/2002  | 40641      | 2002-367583        | JP | System And Method For Securing Drive Access To Media Based On Medium Identification Numbers                                 |
| 82068116     | Granted     | 4290881       | 1/16/1998   | 4/10/2009  | 2000-540540        | JP | Methods And Apparatus For Data Storage On Magnetic Media Including Error Correction Codes                                   |
| 82257476     | Granted     | 5183752       | 6/27/2008   | 1/25/2013  | P2010-544957       | JP | APPARATUS, AND AN ASSOCIATED METHODOLOGY, FOR FACILITATING AUTHENTICATION USING A DIGITAL MUSIC AUTHENTICATION TOKEN        |

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| 82032905     | Granted     | 3655486       | 3/18/1999   | 3/11/2005  | H11-073367         | JP | System For Logging And Enabling Ordered Retrieval Of Management Events                                       |
| 82195601     | Granted     | 4332149       | 11/25/2005  | 6/26/2009  | 2005-340545        | JP | MPLS VPN Fault Management Using IGP Monitoring System                                                        |
| 84274039     | Application |               | 12/4/2012   |            |                    | JP | Displaying Information Technology Conditions with Heat Maps                                                  |
| 82244426     | Granted     | 5313336       | 5/29/2008   | 41467      | 2011-507399        | JP | Method And System Of Testing Software Using Real Time Replication                                            |
| 90041019     | Application |               | 5/31/2011   |            | 2015-166360        | JP | APPLICATION SECURITY TESTING                                                                                 |
| 81966917     | Granted     | 4422359       | 4/6/2001    | 12/11/2009 | 2001-108265        | JP | Method And System For Using A Universal Serial Bus (USB) As A Peer-to-peer Network                           |
| 82196348     | Granted     | 4668698       | 6/28/2005   | 1/21/2011  | 2005-187526        | JP | Enablement Of Software-controlled Services Required By Installed Applications                                |
| 82201097     | Granted     | 4463212       | 1/25/2006   | 2/26/2010  | 2006-016022        | JP | Method And System Of Aligning Execution Point Of Duplicate Copies Of A User Program By Copying Memory Stores |
| 82204532     | Granted     | 4121525       | 1/6/2006    | 5/9/2008   | 2006-001432        | JP | Method For Controlling Resource Utilization And Computer System                                              |
| 82207343     | Granted     | 4792047       | 3/3/2005    | 7/29/2011  | 2007-557671        | JP | A Method Of Predicting Availability Of A System                                                              |
| 82241426     | Granted     | 5042372       | 2/26/2008   | 41110      | P2010-547598       | JP | Method And Apparatus For Performing A Host Enumeration Process                                               |
| 82128173     | Granted     | 3895005       | 6/5/1997    | 12/22/2006 | H09-162024         | JP | CONNECTING METHOD FOR EXTENSION CARD AND COMPUTER SYSTEM TO WHICH EXTENSION CARD CAN BE CONNECTED            |
| 82177997     | Granted     | 4994596       | 3/15/2005   | 41047      | P2005-072279       | JP | SYSTEM AND METHOD FOR VOLTAGE CONTROL OF SUB CIRCUIT                                                         |
| 82253477     | Granted     | 4443924       | 10/15/2002  | 1/22/2010  | 2003-537269        | JP | Method And System For Communicating Telematics Messages                                                      |
| 82675557     | Granted     | 5149997       | 3/12/2009   | 12/7/2012  | 2011-533190        | JP | NANOWIRE BOLOMETER PHOTODETECTOR                                                                             |
| 83165234     | Granted     | 5696213       | 7/22/2010   | 2/13/2015  | 2013-520695        | JP | Context-based Item Bookmarking                                                                               |
| 84162976     | Published   |               | 8/30/2012   |            | 2015-527433        | JP | ENCRYPTED DATA STORE FOR RECORDS                                                                             |
| 82891509     | Granted     | 5296924       | 10/26/2009  | 6/21/2013  | 2012-518765        | JP | Quantum Repeater And System And Method For Creating Extended Entanglements                                   |
| 82184180     | Granted     | 4397398       | 1/28/2005   | 10/30/2009 | 2006-551584        | JP | Split-stream Multi-access Point Data Transmission (as Amended)                                               |
| 82006997     | Granted     | 4348093       | 2/21/2003   | 7/24/2009  | 2003-043586        | JP | System And Method For Memory Interleaving Using Cell Map With Entry Grouping For Higher-way Interleaving     |
| 84119249     | Published   |               | 10/13/2010  |            | 2014-255698        | JP | DASHBOARD DISPLAY METHOD AND APPARATUS                                                                       |
| 82254038     | Granted     | 5027386       | 5/6/2003    | 6/29/2012  | P2004-504164       | JP | Payment System And Method                                                                                    |

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| 84185037     | Application |               | 9/14/2012   |            | 2015-531896        | JP | DETERMINING A LOAD DISTRIBUTION FOR DATA UNITS                                                                                                               |
| 82128611     | Granted     | 3641354       | 8/18/1997   | 1/28/2005  | H09-221332         | JP | PACKET INSPECTION DEVICE                                                                                                                                     |
|              |             |               |             |            |                    |    | A SERVER CONTROLLER CONFIGURED TO SNOOP AND RECEIVE A DUPLICATIVE COPY OF DISPLAY DATA PRESENTED TO A VIDEO CONTROLLER                                       |
| 82219892     | Granted     | 4870047       | 8/7/2007    | 40872      | P2007-205051       | JP | Methods And Systems For Arbitrating Error Handling And Firmware Updates                                                                                      |
| 82277636     | Granted     | 4033727       | 7/8/2002    | 11/2/2007  | 2002-198988        | JP | System For Controlling Provision Of Information And Method For Controlling Provision Of Information                                                          |
| 84160128     | Application |               | 8/16/2013   |            | 2015-529849        | JP | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                                                                                                             |
| 82218830     | Granted     | 4995837       | 1/26/2007   | 5/18/2012  | P2008-552399       | JP | Mixed-scale Electronic Interface                                                                                                                             |
| 82066370     | Granted     | 4515763       | 8/28/2002   | 40319      | 2003-525793        | JP | Quantum Information Processing Method And Apparatus                                                                                                          |
| 82094648     | Granted     | 4829788       | 7/22/2004   | 9/22/2011  | P2006-520891       | JP | IMPROVEMENTS RELATING TO QUANTUM CRYPTOGRAPHY                                                                                                                |
| 82217393     | Granted     | 5082039       | 8/11/2006   | 41166      | P2008-526233       | JP | Quantum Repeater                                                                                                                                             |
| 82219136     | Granted     | 5096457       | 4/20/2007   | 9/28/2012  | P2009-506614       | JP | Optical-based, Self-authenticating Quantum Random Number Generators                                                                                          |
| 82230380     | Granted     | 5079088       | 6/16/2008   | 9/7/2012   | 2010-513232        | JP | OPTICAL INTERCONNECT                                                                                                                                         |
| 82242677     | Granted     | 5265757       | 4/2/2008    | 5/10/2013  | P2011-502904       | JP | PRISM BEAMSPLITTERS                                                                                                                                          |
| 82405579     | Granted     | 5186593       | 5/9/2008    | 41299      | 2011-508456        | JP | Optically Enabled Broadcast Bus                                                                                                                              |
| 82595666     | Granted     | 5490116       | 7/14/2008   | 3/7/2014   | 2011-518690        | JP | Hybrid Guided-mode Resonance Filter And Method Employing Distributed Bragg Reflection                                                                        |
| 83235825     | Granted     | 5690411       | 10/27/2010  | 2/6/2015   | 2013-536572        | JP | RECEIVERS AND TRANSCIVERS FOR OPTICAL MULTIBUS SYSTEMS                                                                                                       |
| 82194665     | Granted     | 4809184       | 10/25/2006  | 8/26/2011  | P2006-289666       | JP | Impingement Cooling Of Components In An Electronic System                                                                                                    |
| 82091276     | Granted     | 4498735       | 6/7/2002    | 4/23/2010  | 2003-504201        | JP | Secure Machine Platform That Interfaces To Operating Systems And Customized Control Programs                                                                 |
| 82184303     | Granted     | 4897685       | 8/18/2005   | 1/6/2012   | P2007-529993       | JP | Mapping Power System Components                                                                                                                              |
| 82190423     | Granted     | 4616888       | 10/31/2005  | 10/29/2010 | 2007-544354        | JP | Spray Cooling With Spray Deflection                                                                                                                          |
| 82223510     | Granted     | 5121921       | 3/21/2008   | 11/2/2012  | 2010-500948        | JP | Three-dimensional Crossbar Array Systems And Methods For Writing Information To And Reading Information Stored In Three-dimensional Crossbar Array Junctions |
| 82242548     | Granted     | 5160654       | 3/10/2008   | 12/21/2012 | P2010-550641       | JP | Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same                                                                    |
| 82629486     | Granted     | 5289569       | 8/8/2008    | 6/14/2013  | 2011-522032        | JP | Independently Controllable And Reconfigurable Virtual Memory Devices In Memory Modules That Are Pin-compatible With Standard Memory Modules                  |
| 82629546     | Granted     | 5400886       | 8/13/2008   | 11/1/2013  | 2011-522943        | JP | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                                         |

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| 83134889     | Granted     | 5686424       | 6/16/2010   | 1/30/2015  | P2013-515308 JP    |    | Computer Racks                                                                                                    |
| 84163282     | Published   |               | 9/12/2012   |            | 2015-527435 JP     |    | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                                                   |
| 84164192     | Published   |               | 9/12/2012   |            | 2015-527436 JP     |    | METADATA TREE WITH KEY ROTATION INFORMATION                                                                       |
| 82176869     | Granted     | 4635009       | 5/21/2004   | 11/26/2010 | 2006-530523 JP     |    | Use Of Certified Secrets In Communication                                                                         |
| 82242419     | Granted     | 5100844       | 10/14/2008  | 10/5/2012  | 2010-530558 JP     |    | QUANTUM KEY DISTRIBUTION SYSTEM USING LDPC CODES WITH A GRAPH HAVING A TOROID STRUCTURE                           |
| 82236236     | Granted     | 5031106       | 1/30/2008   | 7/6/2012   | P2010-544938 JP    |    | Servo Write Head Gap Width Correction                                                                             |
| 82169123     | Granted     | 4673353       | 10/23/2007  | 1/28/2011  | 2007-275122 JP     |    | Cache And Method For Cache Bypass Functionality                                                                   |
| 82192787     | Granted     | 4465329       | 4/19/2006   | 2/26/2010  | 2006-115313 JP     |    | External State Cache For Computer Processor                                                                       |
| 90051558     | Application |               | 3/29/2013   |            | JP                 |    | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING NODE                                                                 |
| 82128728     | Granted     | 4002337       | 1/5/1998    | 8/24/2007  | H10-000291 JP      |    | NETWORK SWITCH WITH MULTIPLE BUS ARCHITECTURE                                                                     |
| 82164131     | Granted     | 3230960       | 10/9/1995   | 9/14/2001  | 07-261671 JP       |    | VARIABLE FREQUENCY CLOCK CONTROL FOR MICROPROCESSOR-BASED COMPUTER SYSTEMS                                        |
| 82238171     | Granted     | 5400135       | 4/28/2008   | 11/1/2013  | 2011-506241 JP     |    | Adjustable Server-transmission Rates Over Fixed-speed Backplane Connections Within A Multi-server Enclosure       |
| 82716613     | Granted     | 5341198       | 10/30/2008  | 8/16/2013  | P2011-534472 JP    |    | BIT Inversion For Communication Interface                                                                         |
| 82029092     | Granted     | 3659820       | 11/5/1998   | 38436      | H10-314616 JP      |    | Tape Cartridge Reel Lock                                                                                          |
| 82047134     | Granted     | 3585169       | 5/23/2001   | 8/13/2004  | 2001-153896 JP     |    | Positioning System For Removable Data Storage Cartridges                                                          |
| 82067738     | Granted     | 4124887       | 10/29/1998  | 5/16/2008  | H10-308160 JP      |    | Flush Points                                                                                                      |
| 82104941     | Granted     | 4381012       | 3/14/2003   | 10/2/2009  | 2003-069522 JP     |    | An Interactive Service Searching Method Using Meta-date Uds(guid)/system                                          |
| 82185479     | Granted     | 4481180       | 1/26/2005   | 3/26/2010  | 2005-018281 JP     |    | Providing A Flexible Protection Model In A Computer System By Decoupling Protection From Computer Privilege Level |
| 82226249     | Granted     | 5118438       | 10/26/2007  | 10/26/2012 | P2007-278297 JP    |    | Improving Computer Networks                                                                                       |
| 81993131     | Granted     | 4025569       | 4/2/2002    | 10/12/2007 | 2002-099588 JP     |    | Method And System For Controlling A Policy-based Network                                                          |
| 82189412     | Granted     | 4621087       | 7/25/2005   | 11/5/2010  | 2005-214194 JP     |    | System And Method For Operating Load Balancers For Multiple Instance Applications                                 |
| 82189415     | Granted     | 4374391       | 7/25/2005   | 9/11/2009  | 2008-068757 JP     |    | System And Method For Operating Load Balancers For Multiple Instance Applications                                 |
| 82099388     | Granted     | 4234613       | 1/20/2004   | 12/19/2008 | 2004-011776 JP     |    | Methods And Apparatus For Rapidly Activating Inactive Components In A Computer System                             |
| 82214450     | Granted     | 4949157       | 7/24/2007   | 3/16/2012  | P2007-192067 JP    |    | SYSTEM AND METHOD FOR RECOMPILING CODE BASED ON LOCALITY DOMAIN AND THREAD AFFINITY IN NUMA COMPUTER SYSTEMS      |

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| 82227998     | Granted     | 4848392         | 5/15/2008   | 10/21/2011 | P2008-128046       | JP | Method And System To Determine Device Criticality For Optimal |
| 84301896     | Application |                 | 3/28/2013   |            |                    | JP | plugging In Computer Configurations                           |
| 82251530     | Granted     | 4480189         | 2/12/1996   | 3/26/2010  | H08-525735         | JP | Implementing Coherency with Reflective Memory                 |
|              |             |                 |             |            |                    |    | System And Method For Electronic Transfer Of Funds Using      |
|              |             |                 |             |            |                    |    | An Automated Teller Machine To Dispense The Transfered        |
|              |             |                 |             |            |                    |    | Funds                                                         |
| 83640289     | Granted     | 5766346         | 4/7/2011    | 6/26/2015  | 2014-503640        | JP | METHOD AND APPARATUS FOR MOVING A SOFTWARE                    |
|              |             |                 |             |            |                    |    | OBJECT                                                        |
| 82004366     | Granted     | 4616558         | 4/16/2003   | 10/29/2010 | 2003-586537        | JP | Using Pattern Recognition Techniques For Energy               |
|              |             |                 |             |            |                    |    | Management In Large Data Centers                              |
| 82195847     | Granted     | 4685159         | 4/26/2006   | 2/18/2011  | 2008-509095        | JP | Nanoscale Interconnection Interface                           |
| 82209458     | Granted     | 4864098         | 1/23/2007   | 40865      | P2008-552379       | JP | Compute Clusters Employing Photonic Interconnections For      |
|              |             |                 |             |            |                    |    | Transmitting Optical Signals Between Compute Cluster Nodes    |
|              |             |                 |             |            |                    |    |                                                               |
| 82209578     | Granted     | 5133347         | 10/12/2007  | 11/16/2012 | P2009-532429       | JP | Composite Material With Chirped Resonant Cells                |
| 82226996     | Granted     | 5289330         | 1/10/2008   | 6/14/2013  | 2009-545602        | JP | Capacitively Coupling Layers Of A Multilayer Device           |
| 83242122     | Granted     | 5683712         | 10/29/2010  | 1/23/2015  | 2013-536581        | JP | OPTICAL CONNECTOR                                             |
| 82579547     | Granted     | 5357777         | 12/28/2007  | 41523      | 2009544284         | JP | Storing Log Data Efficiently While Supporting Querying To     |
|              |             |                 |             |            |                    |    | Assist in Computer Network Security                           |
|              |             |                 |             |            |                    |    |                                                               |
| 84291305     | Application |                 | 1/15/2013   |            |                    | JP | Dynamic Firmware Updating                                     |
| 82172558     | Granted     | 4317876         | 5/13/2004   | 5/29/2009  | 2006-533127        | JP | Redundant Data Assignment In A Data Storage System            |
| 82232180     | Granted     | 4929400         | 7/30/2008   | 2/17/2012  | P2010-519919       | JP | Electronic System Having Free Space Optical Elements          |
| 82235051     | Granted     | 5070342         | 10/23/2008  | 8/24/2012  | 2010-531049        | JP | All Optical Fast Distributed Arbitration In A Computer System |
|              |             |                 |             |            |                    |    | Device                                                        |
| 82239545     | Granted     | 5563986         | 11/27/2007  | 6/20/2014  | 2010-534928        | JP | SYSTEM SYNTHESIS TO MEET AN ENERGY LOSS TARGET                |
|              |             |                 |             |            |                    |    | VALUE                                                         |
| 83681016     | Granted     | 5666722         | 3/14/2011   | 12/19/2014 | P2013-557998       | JP | MEMORY INTERFACE                                              |
| 82191977     | Granted     | 4208884         | 1/24/2006   | 10/31/2008 | 2006-015205        | JP | Reversible Fan Of Electronic Module                           |
| 82165229     | Granted     | 10-0290191-0000 | 12/27/1996  | 2/28/2001  | 10-1996-0072712    | KR | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING                |
|              |             |                 |             |            |                    |    | USING A RELATIVE ERROR APPROACH                               |
| 82180970     | Granted     | 1188252         | 1/6/2006    | 9/27/2012  | 2006-0001748       | KR | Systems And Methods For Mitigating Latency Associated         |
|              |             |                 |             |            |                    |    | With Error Detection And Correction                           |
| 82186013     | Granted     | 10-0965965-0000 | 11/1/2006   | 40345      | 10-2008-7013211    | KR | Crossbar-array Designs And Wire Addressing Methods That       |
|              |             |                 |             |            |                    |    | Tolerate Misalignment Of Electrical Components With Wires     |
|              |             |                 |             |            |                    |    | At Wire Overlap Points                                        |
| 82200083     | Granted     | 10-0929305-0000 | 10/14/2005  | 11/23/2009 | 10-2007-7009540    | KR | Nanoscale Latches And Impedance-encoded Logic For Use In      |
|              |             |                 |             |            |                    |    | Nanoscale State Machines, Nanoscale Pipelines, And In Other   |
|              |             |                 |             |            |                    |    | Nanoscale Electronic Circuits                                 |
| 82207298     | Granted     | 10-1407181      | 8/1/2007    | 6/5/2014   | 2009-7002204       | KR | Cooling Fan Module                                            |

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| 82208303     | Granted   | 1014231550000   | 1/29/2008   | 7/18/2014  | 10-2009-7015918    | KR | Metamaterial Structures For Light Processing And Methods Of Processing Light                                    |
| 82208360     | Granted   | 10-0959426-0000 | 6/21/2006   | 5/14/2010  | 10-2007-7029725    | KR | Integrated Circuit Device Having Optically Coupled Layers                                                       |
| 82214624     | Granted   | 10-1408471      | 10/16/2007  | 6/10/2014  | 2009-7009995       | KR | Photonic-based Interconnects For Interconnecting Multiple Integrated Circuits                                   |
| 82224167     | Granted   | 10-1455706      | 4/25/2008   | 10/22/2014 | 2009-7022246       | KR | Nanowire-based Opto-electronic Devices                                                                          |
| 82225673     | Granted   | 10-1062790-0000 | 4/20/2007   | 8/31/2011  | 10-2008-7025624    | KR | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                             |
| 82225727     | Granted   | 10-1343705      | 10/16/2007  | 12/13/2013 | 2009-7009993       | KR | Photonic-interconnect Systems For Reading Data From Memory Cells And Writing Data To Memory Integrated Circuits |
| 82226057     | Granted   | 10-1513315      | 3/28/2008   | 4/13/2015  | 2009-7020595       | KR | Data Transmission System And Method                                                                             |
| 82227041     | Granted   | 10-1448575      | 1/3/2008    | 10/1/2014  | 2009-7015026       | KR | Photonic Systems And Methods For Encoding Data In Carrier Electromagnetic Waves                                 |
| 82230539     | Published |                 | 6/4/2008    |            | 2009-7025885       | KR | OPTICAL INTERCONNECT                                                                                            |
| 82233158     | Granted   | 10-1419292      | 2/20/2008   | 7/8/2014   | 2010-7018505       | KR | Redriver With Two Reference Clocks And Method Of Operation Thereof                                              |
| 82234526     | Granted   | 10-1516332      | 6/16/2008   | 4/23/2015  | 2009-7026392       | KR | Misalignment Tolerant Free Space Optical Transceiver                                                            |
| 82234547     | Published |                 | 7/16/2008   |            | 2010-7001800       | KR | Free Space WDM Signal Detector                                                                                  |
| 82234985     | Granted   | 10-1516690      | 7/30/2008   | 4/24/2015  | 2010-7004424       | KR | Microresonator Systems And Methods Of Fabricating The Same                                                      |
| 82235150     | Granted   | 10-1434239      | 1/31/2008   | 8/20/2014  | 2010-7019398       | KR | MODULAR DATA PROCESSING COMPONENTS AND SYSTEMS                                                                  |
| 82235171     | Granted   | 10-1517423      | 10/15/2008  | 4/28/2015  | 2010-7008114       | KR | PLASMONIC HIGH-SPEED DEVICES FOR ENHANCING THE PERFORMANCE OF MICROELECTRONIC DEVICES                           |
| 82238141     | Granted   | 10-1409308      | 1/30/2008   | 6/12/2014  | 10-2010-7019266    | KR | OPTICAL INTERCONNECTS                                                                                           |
| 82238336     | Granted   | 10-1395167      | 1/31/2008   | 5/8/2014   | 10-2010-7019445    | KR | OPTICAL TAPS FOR CIRCUIT BOARD-MOUNTED OPTICAL WAVEGUIDES                                                       |
| 82239104     | Granted   | 10-1379172      | 4/2/2008    | 4/17/19    | 2010-7024453       | KR | Disk Drive Data Encryption                                                                                      |
| 82239464     | Granted   | 10-1404529      | 1/30/2008   | 5/30/2014  | 10-2010-7019217    | KR | PLASMON ENHANCED LIGHT-EMITTING DIODES                                                                          |
| 82241450     | Granted   | 101400597       | 2/18/2008   | 5/21/2014  | 20107018373        | KR | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device                 |
| 82241471     | Granted   | 10-1445436      | 4/2/2008    | 4/1904     | 2010-7024661       | KR | Converting Resets In Shared I/O System                                                                          |
| 82241894     | Granted   | 10-1468520      | 3/4/2008    | 11/27/2014 | 2010-7019672       | KR | ANGLE SENSOR, SYSTEM AND METHOD EMPLOYING GUIDED-MODE RESONANCE                                                 |
| 82242221     | Granted   | 10-1434237      | 3/28/2008   | 8/20/2014  | 2010-7021578       | KR | FLEXIBLE OPTICAL INTERCONNECT                                                                                   |
| 82242581     | Granted   | 10-1465293      | 3/11/2008   | 11/19/2014 | 2010-7022707       | KR | Optoelectronic Switches Using On-chip Optical Waveguides                                                        |
| 82242641     | Granted   | 10-1474811      | 4/2/2008    | 12/15/2014 | 2010-7022135       | KR | IMAGE-ROTATION PRISMS AND OPTICAL INTERCONNECTS EMPLOYING THE SAME                                              |
| 82242659     | Granted   | 10-1434236      | 4/4/2008    | 8/20/2014  | 2010-7022113       | KR | BEAMSPLITTERS WITH OFFSET COMPENSATION                                                                          |

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| 82242716     | Granted   | 10-1470994      | 5/1/2008    | 12/3/2014  | 10-2010-7024409    | KR | Storing Checkpoint Data In Non-volatile Memory                                                                                              |
| 82245329     | Granted   | 10-1453946      | 5/7/2008    | 10/16/2014 | 2010-7027530       | KR | ARRAYS, SYSTEM AND METHOD FOR BI-DIRECTIONAL DATA TRANSMISSION                                                                              |
| 82247459     | Granted   | 10-1489416      | 9/29/2008   | 1/28/2015  | 2010-7020549       | KR | Neuromorphic Circuit                                                                                                                        |
| 82274732     | Granted   | 10-1045362-0000 | 11/7/2003   | 6/23/2011  | 10-2005-7008205    | KR | Active Network Defense System and Method                                                                                                    |
| 82405417     | Granted   | 10-1464026      | 5/8/2008    | 11/14/2014 | 2010-7027638       | KR | Optical Polymorphic Computer Systems                                                                                                        |
| 82405549     | Granted   | 10-1394844      | 5/9/2008    | 5/7/2014   | 2010-7027654       | KR | Proximity Free Space Optical Interconnect                                                                                                   |
| 82405581     | Granted   | 10-1421777      | 5/9/2008    | 7/15/2014  | 2010-7027755       | KR | Optically Enabled Broadcast Bus                                                                                                             |
| 82405610     | Granted   | 10-1389587      | 5/8/2008    | 4/21/2014  | 2010-7027627       | KR | Hierarchical Passive Networks                                                                                                               |
| 82573901     | Granted   | 10-1548779      | 6/17/2008   | 8/25/2015  | 2011-7001225       | KR | Optical Broadcast Systems And Methods                                                                                                       |
| 82576824     | Granted   | 10-1433425      | 6/9/2008    | 8/18/2014  | 2010-7029556       | KR | Cylindrical Resonators For Optical Signal Routing                                                                                           |
| 82579392     | Granted   | 10-1497610      | 10/25/2007  | 2/24/2015  | 2009-7004992       | KR | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security                            |
| 82581170     | Granted   | 10-1150653      | 5/12/2005   | 5/21/2012  | 2006-7025455       | KR | APPARATUS AND METHOD FOR DEVELOPING, TESTING AND MONITORING SECURE SOFTWARE                                                                 |
| 82595668     | Granted   | 10-1443728      | 7/14/2008   | 9/17/2014  | 2011-7003251       | KR | Hybrid Guided-mode Resonance Filter And Method Employing Distributed Bragg Reflection                                                       |
| 82595707     | Granted   | 10-1510356      | 7/31/2008   | 4/1/2015   | 2011-7002500       | KR | Nano-wire Optical Block Devices For Amplifying, Modulating, And Detecting Optical Signals                                                   |
| 82629488     | Granted   | 10-1477849      | 8/8/2008    | 12/23/2014 | 2011-7005365       | KR | Independently Controllable And Reconfigurable Virtual Memory Devices In Memory Modules That Are Pin-compatible With Standard Memory Modules |
| 82629548     | Granted   | 10-1474597      | 8/13/2008   | 12/12/2014 | 2011-7005846       | KR | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                        |
| 82634150     | Granted   | 10-1508618      | 8/26/2008   | 3/30/2015  | 2011-7006857       | KR | Tunable Nanowire Resonant Cavity For Optical Modulation                                                                                     |
| 82634173     | Granted   | 10-1479149      | 8/27/2008   | 12/29/2014 | 2011-7004477       | KR | Dynamic Impedance Receiver Circuit For Ultrast Low-power Photodetector                                                                      |
| 82653592     | Published |                 | 9/22/2009   |            | 2011-7009994       | KR | DIFFERENTIAL ON-LINE TERMINATION                                                                                                            |
| 82654479     | Published |                 | 9/24/2008   |            | 2011-7006725       | KR | Polarization Maintaining Large Core Hollow Waveguides                                                                                       |
| 82678346     | Granted   | 10-1468521      | 12/23/2008  | 11/27/2014 | 2011-7014537       | KR | Memristive Device And Methods Of Making And Using The Same                                                                                  |
| 82716615     | Granted   | 10-1520141      | 10/30/2008  | 5/7/2015   | 2011-7009958       | KR | BIT Inversion For Communication Interface                                                                                                   |
| 82716637     | Granted   | 10-1489033      | 10/31/2008  | 1/27/2015  | 2011-7012118       | KR | Variably Configurable Computer Buses                                                                                                        |
| 82716703     | Published |                 | 10/31/2008  |            | 2011-7012393       | KR | Optical Connector Interconnection System And Method                                                                                         |
| 82716730     | Granted   | 10-1464816      | 10/31/2008  | 11/18/2014 | 2011-7012106       | KR | Optical Beam Couplers And Splitters                                                                                                         |
| 82731795     | Granted   | 1011114330000   | 11/22/2010  | 1/26/2012  | 10-2010-7026179    | KR | Active Network Defense System and Method                                                                                                    |
| 82790079     | Granted   | 10-1520143      | 1/9/2009    | 5/7/2015   | 2011-7018485       | KR | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                                                            |
| 82837230     | Published |                 | 3/27/2009   |            | 2011-7022663       | KR | SWITCHABLE JUNCTION WITH INTRINSIC DIODE                                                                                                    |

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| 82837341     | Published   |               | 6/25/2009   |            | 2011-7030803 KR    |    | SWITCHABLE JUNCTION WITH INTRINSIC DIODES WITH DIFFERENT SWITCHING THRESHOLDS                      |
| 82859849     | Granted     | 10-1531981    | 4/29/2009   | 6/22/2015  | 2011-7026266 KR    |    | OPTICAL MEMORY EXPANSION                                                                           |
| 82924257     | Application |               | 9/4/2009    |            | 2012-7008623 KR    |    | MEMRISTORS BASED ON MIXED-METAL-VALENCE COMPOUNDS                                                  |
| 82925133     | Published   |               | 3/12/2010   |            | 2012-7007192 KR    |    | DEVICE HAVING MEMRISTIVE MEMORY                                                                    |
| 82925849     | Published   |               | 9/4/2009    |            | 2012-7008691 KR    |    | SWITCHABLE JUNCTION WITH AN INTRINSIC DIODE FOR REDUCED CURRENT                                    |
|              |             |               |             |            |                    |    | WITH A VOLTAGE DEPENDENT RESISTOR                                                                  |
| 83165236     | Published   |               | 7/22/2010   |            | 2013-7004358 KR    |    | Context-based Item Bookmarking                                                                     |
| 83168702     | Granted     | 10-1448412    | 8/30/2010   | 9/30/2014  | 2013-7005370 KR    |    | Multiplayer Memory Array                                                                           |
| 83209019     | Published   |               | 11/1/2010   |            | 2013-7011186 KR    |    | STORAGE ELEMENT READING USING RING OSCILLATOR                                                      |
| 83215475     | Granted     | 10-1510258    | 9/16/2010   | 42096      | 2013-7009037 KR    |    | NANOSCALE SWITCHING DEVICE                                                                         |
| 83219399     | Granted     | 10-1479154    | 10/11/2010  | 42002      | 2013-7010688 KR    |    | MICROFLUIDIC CHIP ASSEMBLY                                                                         |
| 83255663     | Published   |               | 2/28/2011   |            | 2013-7015619 KR    |    | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                            |
| 83423125     | Granted     | 10-1510358    | 1/31/2011   | 42095      | 2013-7020396 KR    |    | BROADBAND OPTICAL BEAM SPLITTERS                                                                   |
| 83515794     | Granted     | 10-1460122    | 2/1/2011    | 41947      | 2013-7023031 KR    |    | NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                                            |
| 83546345     | Published   |               | 2/10/2011   |            | 2013-7023373 KR    |    | GRATING-BASED POLARIZERS AND OPTICAL ISOLATORS                                                     |
| 83566668     | Published   |               | 8/25/2011   |            | 10-2014-7004419 KR |    | Model-based stereoscopic and multiview cross-talk reduction                                        |
| 83680966     | Published   |               | 4/6/2011    |            | 10-2013-7026306 KR |    | IDENTIFYING SIMILARITY                                                                             |
| 83681018     | Granted     | 10-1527308    | 3/14/2011   | 42157      | 2013-7027086 KR    |    | MEMORY INTERFACE                                                                                   |
| 83721332     | Published   |               | 5/31/2011   |            | 2013-7031852 KR    |    | AUTOMATED SECURITY TESTING                                                                         |
| 83735427     | Published   |               | 6/28/2011   |            | 10-2013-7034643 KR |    | SHIFTABLE MEMORY                                                                                   |
| 83769079     | Published   |               | 7/27/2011   |            | 10-2014-7002360 KR |    | Method and System for Reducing Write-Buffer Capacities within Memristor-Based Data-Storage Devices |
| 83776071     | Published   |               | 7/29/2011   |            | 10-2014-7005376 KR |    | CREDENTIAL VALIDATION                                                                              |
| 83784001     | Published   |               | 7/12/2011   |            | 10-2014-7003567 KR |    | AUDIO SAMPLE                                                                                       |
| 83786528     | Published   |               | 7/22/2011   |            | 2014-7003655 KR    |    | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                            |
| 83789133     | Published   |               | 9/14/2011   |            | 10-2014-7006553 KR |    | IMPARTING DURABILITY TO A TRANSACTIONAL MEMORY SYSTEM                                              |
| 83807343     | Granted     | 10-1528572    | 8/3/2011    | 42163      | 2014-7004603 KR    |    | NITRIDE-BASED MEMRISTORS                                                                           |
| 83815239     | Published   |               | 8/26/2011   |            | 2014-7006935 KR    |    | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                            |
|              |             |               |             |            |                    |    |                                                                                                    |
| 83835759     | Published   |               | 9/6/2011    |            | 2014-7008220 KR    |    | MECHANICALLY ALIGNED OPTICAL ENGINE                                                                |
| 83835851     | Published   |               | 9/15/2011   |            | 2014-7009080 KR    |    | VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                            |
| 83855590     | Granted     | 10-1487291    | 3/14/2014   | 42026      | 2014-7006885 KR    |    | Photonic Systems And Methods For Encoding Data In Carrier Electromagnetic Waves                    |

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| 83857918     | Published |               | 10/12/2011  |            | 2014-7009994       | KR | SELECT DEVICE FOR CROSS POINT MEMORY STRUCTURE                                                                              |
| 83858312     | Published |               | 10/21/2011  |            | 2014-7010291       | KR | GRATING COUPLERS WITH DEEP-GROOVE NON-UNIFORM GRATINGS                                                                      |
| 83862114     | Published |               | 10/28/2011  |            | 2014-7013986       | KR | METAL-INSULATOR PHASE TRANSITION FLIP-FLOP                                                                                  |
| 83875496     | Published |               | 10/27/2011  |            | 10-2014-7011218    | KR | SHIFTABLE MEMORY SUPPORTING ATOMIC OPERATION                                                                                |
| 83881936     | Published |               | 10/28/2011  |            | 10-2014-7011192    | KR | ROW SHIFTING SHIFTABLE MEMORY                                                                                               |
| 83883379     | Published |               | 10/28/2011  |            | 2014-7014302       | KR | DEVICES INCLUDING A DIAMOND LAYER                                                                                           |
| 83948715     | Published |               | 1/9/2012    |            | 10-2014-7015602    | KR | Optical Connections                                                                                                         |
| 83948789     | Published |               | 1/10/2012   |            | 2014-7015546       | KR | OPTICAL CONNECTORS                                                                                                          |
| 83948835     | Published |               | 1/12/2012   |            | 10-2014-7015966    | KR | INTEGRATED SUB-WAVELENGTH GRATING SYSTEM                                                                                    |
| 83951537     | Published |               | 1/27/2012   |            | 2014-7017677       | KR | Glass-Silicon Wafer-Stacked Opto-Electronic Platforms                                                                       |
| 83959952     | Published |               | 1/31/2012   |            | 2014-7017837       | KR | APPARATUS FOR USE IN OPTOELECTRONICS                                                                                        |
| 83981742     | Published |               | 3/27/2012   |            | 2014-7021356       | KR | NONVOLATILE MEMORY BANK GROUPS                                                                                              |
| 83984212     | Published |               | 1/6/2012    |            | 2014-7021940       | KR | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION                  |
|              |           |               |             |            |                    |    | FLEXIBLE CIRCUIT CABLE WITH FLOATING CONTACT                                                                                |
| 83992370     | Published |               | 4/18/2012   |            | 2014-7020753       | KR | Flexible Cooling of Server Tray Through Dry Disconnect Thermal Connector.                                                   |
| 83995719     | Published |               | 2/9/2012    |            | 2014-7021264       | KR |                                                                                                                             |
|              |           |               |             |            |                    |    | LIQUID TEMPERATURE CONTROL COOLING                                                                                          |
| 83995736     | Published |               | 3/12/2012   |            | 20147021265        | KR | VOLTAGE REGULATOR CONTROL SYSTEM                                                                                            |
| 83995831     | Published |               | 4/20/2012   |            | 20147020915        | KR | DYNAMIC/STATIC RANDOM ACCESS MEMORY (D/SRAM)                                                                                |
| 83998911     | Allowed   |               | 1/30/2012   |            | 2014-7021344       | KR | NONLINEAR MEMRISTORS                                                                                                        |
| 84020493     | Published |               | 4/25/2012   |            | 2014-7026686       | KR | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM ON A COMPUTER                                                            |
| 84022151     | Published |               | 2/22/2012   |            | 2014-7026285       | KR | INTEGRATED OPTICAL SUB-ASSEMBLY                                                                                             |
|              |           |               |             |            |                    |    | MEMORY MODULE WITH A DUAL-PORT BUFFER                                                                                       |
| 84068288     | Published |               | 4/16/2012   |            | 2014-7028937       | KR | Optical Shuffling                                                                                                           |
| 84072043     | Published |               | 6/28/2012   |            | 2014-7030513       | KR | OPTICAL ENGINE                                                                                                              |
| 84076056     | Published |               | 6/28/2012   |            | 2014-7030453       | KR | NON-VOLATILE RESISTIVE MEMORY CELLS                                                                                         |
| 84076176     | Published |               | 7/26/2012   |            | 2015-7001721       | KR | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY |
| 84078607     | Published |               | 7/31/2012   |            | 2014-7030671       | KR | OPTICAL COUPLING SYSTEM AND METHOD FOR FABRICATING THE SAME                                                                 |
| 84104755     | Published |               | 8/17/2012   |            | 2014-7032040       | KR | COMPACT PHOTONIC PLATFORMS                                                                                                  |
|              |           |               |             |            |                    |    | SMART MEMORY BUFFERS                                                                                                        |
| 84112893     | Published |               | 7/30/2012   |            | 2015-7001809       | KR | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                                              |
| 84113025     | Published |               | 7/30/2012   |            | 2015-7001697       | KR | CONTROLLING TEMPERATURES IN OPTICAL CIRCUITS                                                                                |
| 84140153     | Published |               | 10/30/2012  |            | 2015-7002546       | KR |                                                                                                                             |
| 84141100     | Published |               | 9/10/2012   |            | 2015-7002427       | KR |                                                                                                                             |
| 84158904     | Published |               | 9/13/2012   |            | 2015-7005987       | KR |                                                                                                                             |

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| 84160132     | Published   |                 | 8/16/2013   |            | 2015-7004207       | KR | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                                     |
| 84162683     | Published   |                 | 8/29/2012   |            | 2015-7006785       | KR | SECURITY SCAN BASED ON DYNAMIC TAINT                                                 |
| 84182216     | Published   |                 | 9/28/2012   |            | 2015-7009868       | KR | Application Security Testing                                                         |
| 84184520     | Published   |                 | 9/27/2012   |            | 2015-7007046       | KR | TRANSMIT SPECIFIC TRAFFIC ALONG BLOCKED LINK                                         |
| 84193717     | Application |                 | 1/14/2013   |            | 2015-7017338       | KR | NONVOLATILE MEMORY ARRAY LOGIC                                                       |
| 84195012     | Application |                 | 1/28/2013   |            | 2015-7018797       | KR | RADIUSED ALIGNMENT POST FOR SUBSTRATE MATERIAL                                       |
| 84210930     | Application |                 | 1/30/2013   |            | 2015-7020716       | KR | RUNTIME BACKUP OF DATA IN A MEMORY MODULE                                            |
| 84241564     | Published   |                 | 12/7/2012   |            | 2015-7016151       | KR | NETWORK RESOURCE MANAGEMENT                                                          |
| 84290795     | Application |                 | 1/30/2013   |            | 2015-7020722       | KR | NON-VOLATILE MEMORY WRITE MECHANISM                                                  |
| 84301128     | Application |                 | 1/31/2013   |            | 2015-7020664       | KR | ADAPTIVE-RANULARITY ROW BUFFER CACHE                                                 |
| 84304474     | Application |                 | 1/31/2013   |            | 2015-7020833       | KR | SELECTING CIRCUITS OF A MULTI-LEVEL INTEGRATED CIRCUIT                               |
| 84304491     | Application |                 | 3/15/2013   |            | 2015-7020802       | KR | MEMORY MODULE CONTROLLER SUPPORTING EXTENDED WRITES                                  |
| 84306269     | Application |                 | 3/20/2013   |            | 2015-7020796       | KR | CACHING DATA IN A MEMORY SYSTEM HAVING MEMORY NODES AT DIFFERENT HIERARCHICAL LEVELS |
| 90022764     | Application |                 | 1/31/2013   |            | 2015-7020916       | KR | RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH                                         |
| 90024613     | Application |                 | 3/25/2013   |            | 2015-7026567       | KR | MEMORY DEVICE HAVING ERROR CORRECTION LOGIC                                          |
| 90051591     | Application |                 | 3/29/2013   |            | 2015-7026438       | KR | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING NODE                                    |
| 83995801     | Published   |                 | 3/12/2012   |            | 2014-7021350       | KR | RACK COOLING SYSTEM WITH A COOLING SECTION                                           |
| 82651138     | Published   |                 | 9/23/2009   |            | 2011-7009759       | KR | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                           |
| 84301900     | Application |                 | 3/28/2013   |            | 2015-7020797       | KR | Implementing Coherency with Reflective Memory                                        |
| 83991633     | Published   |                 | 2/27/2012   |            | 10-2014-7021347    | KR | METHOD AND SYSTEM FOR VEHICLE PERSONALIZATION                                        |
| 82716525     | Granted     | 10-1475113      | 10/30/2008  | 41988      | 2011-7009754       | KR | Redundant Array Of Independent Disks (RAID) Write Cache Sub-assembly                 |
| 82180511     | Granted     | 10-1086599      | 1/11/2005   | 40864      | 2005-0002604       | KR | Uncertain Data Arrival Time                                                          |
| 82043036     | Granted     | 627225          | 12/17/1998  | 38887      | 2000-7011047       | KR | Tape Leader Pin Assembly And Method For Making The Same                              |
| 82086053     | Granted     | 10-0965991-0000 | 4/25/2006   | 40345      | 10-2007-7024484    | KR | Three-dimensional Nanoscale Crossbars                                                |
| 82201547     | Granted     | 10-0936858-0000 | 4/19/2006   | 40184      | 10-2007-7024049    | KR | Multiplexer Interface To A Nanoscale-crossbar                                        |
| 82226336     | Granted     | 10-1390430      | 10/3/2007   | 41752      | 10-2009-7009024    | KR | Electrically Actuated Switch                                                         |
| 82244567     | Granted     | 10-1438469      | 5/22/2008   | 9/1/2014   | 2010-7014868       | KR | HYBRID MICROSCALE-NANOSCALE NEUROMORPHIC INTEGRATED CIRCUIT                          |
| 83834201     | Published   |                 | 9/2/2011    |            | 2014-7008680       | KR | APPARATUS TO STORE DATA AND METHODS TO READ MEMORY CELLS                             |
| 83933016     | Published   |                 | 12/12/2011  |            | 2014-7014369       | KR | MEMRISTORS AND METHODS OF FABRICATION                                                |
| 84110966     | Published   |                 | 7/27/2012   |            | 2015-7001911       | KR | DYNAMIC SENSE CIRCUITRY                                                              |

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| 82188424     | Granted     | 10-0871520-0000 | 11/18/2005  |            | 10-2007-7013892    | KR | Composite Material With Controllable Resonant Cells                                                                      |
| 82230518     | Published   |                 | 7/30/2008   | 39777      | 2010-7002259       | KR | Optical Interconnect                                                                                                     |
| 82232513     | Granted     | 10-1508619      | 7/30/2008   | 3/30/2015  | 2010-7004502       | KR | System And Methods For Routing Optical Signals                                                                           |
| 82233452     | Granted     | 10-1492576      | 10/15/2008  | 2/5/2015   | 2010-7010650       | KR | OPTICAL INTERCONNECT SYSTEM PROVIDING COMMUNICATION BETWEEN COMPUTER SYSTEM COMPONENTS                                   |
| 82234952     | Granted     | 10-1474813      | 7/30/2008   | 12/15/2014 | 2010-7002202       | KR | Microresonator System And Methods Of Fabricating The Same                                                                |
| 82235015     | Granted     | 10-1513324      | 10/23/2008  | 4/13/2015  | 2010-7008980       | KR | Three-dimensional Die Stacks With Inter-device And Intra-device Optical Interconnect                                     |
| 82235264     | Published   |                 | 7/16/2008   |            | 2010-7001795       | KR | Plasmon-enhanced Electromagnetic-radiation-emitting Devices And Methods For Fabricating The Same                         |
| 82238318     | Granted     | 10-1409307      | 1/31/2008   | 41802      | 10-2010-7019390    | KR | MEMS-BASED PELLICLE BEAMSPLITTER                                                                                         |
| 82240130     | Published   |                 | 10/23/2008  |            | 2010-7009034       | KR | Three-dimensional Memory Module Architectures                                                                            |
| 82247627     | Published   |                 | 4/29/2010   |            | 2010-7027424       | KR | OPTICAL WAVEGUIDES AND METHODS OF MAKING THE SAME                                                                        |
| 82774441     | Published   |                 | 1/7/2009    |            | 2011-7015604       | KR | PHOTONIC WAVEGUIDE                                                                                                       |
| 83706049     | Published   |                 | 4/20/2011   |            | 2013-7029774       | KR | LIGHT-DETECTION SYSTEMS                                                                                                  |
| 83932080     | Published   |                 | 12/9/2011   |            | 2014-7014368       | KR | Optical Connections                                                                                                      |
| 83987013     | Published   |                 | 2/29/2012   |            | 2014-7021329       | KR | UNIDIRECTIONAL RING LASERS                                                                                               |
| 83992346     | Published   |                 | 4/11/2012   |            | 2014-7020693       | KR | ROUTING OPTICAL SIGNALS                                                                                                  |
| 82223399     | Granted     | 10-1036097-0000 | 7/11/2007   | 40676      | 10-2009-7002870    | KR | Defect-and-failure-tolerant Demultiplexer Using Series Replication And Error-control Encoding                            |
| 82692037     | Granted     | 10-1444514      | 10/31/2008  | 9/18/2014  | 2011-7009758       | KR | Prioritized Optical Arbitration Systems And Methods                                                                      |
| 82929798     | Published   |                 | 3/7/2011    |            | 10-2012-7006685    | KR | DATA STORAGE APPARATUS AND METHODS                                                                                       |
| 83680934     | Published   |                 | 3/16/2011   |            | 10-2013-7027251    | KR | SYSTEMS AND METHODS FOR FINE GRANULARITY MEMORY SPARING                                                                  |
| 83862748     | Published   |                 | 10/7/2011   |            | 2014-7009069       | KR | MAPPING PERSISTENT STORAGE                                                                                               |
| 82233755     | Granted     | 1487290         | 5/21/2008   | 42026      | 2010-7001469       | KR | TAMPER-EVIDENT CONNECTOR                                                                                                 |
| 82241564     | Granted     | 10-1324844      | 3/25/2008   | 41575      | 2010-7020960       | KR | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                                   |
| 82653943     | Allowed     |                 | 1/30/2009   |            | 2011-7017908       | KR | SYSTEM AND METHOD FOR INTEGRATING CAPACITY PLANNING AND WORKLOAD MANAGEMENT                                              |
| 90024626     | Application |                 | 9/24/2015   |            | 2015-7026437       | KR | REGULATING MEMORY ACTIVATION RATES                                                                                       |
| 90025977     | Application |                 | 3/28/2013   |            | 2015-7026674       | KR | Shared Memory System                                                                                                     |
| 83728688     | Published   |                 | 6/16/2011   |            | 10-2013-7033118    | KR | System and Method for Policy Generation                                                                                  |
| 8224717      | Granted     | 10-1395170      | 10/16/2007  | 41767      | 10-2009-7010048    | KR | CROSSBAR-MEMORY SYSTEMS AND METHODS FOR WRITING TO AND READING FROM CROSSBAR MEMORY JUNCTIONS OF CROSSBAR-MEMORY SYSTEMS |
| 82218836     | Granted     | 10-1099988      | 1/26/2007   | 40898      | 2008-7018510       | KR | Mixed-scale Electronic Interface                                                                                         |

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| HP Record ID | Status       | Patent Number   | Filing Date | Grant Date | Application Number | CC | Title                                                                                                 |
|--------------|--------------|-----------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------|
| 82631633     | Granted      | 10-1438468      | 7/31/2008   | 41883      | 2011-7004655       | KR | Multi-layer Reconfigurable Switches                                                                   |
| 82678337     | Granted      | 10-1528657      | 10/29/2008  | 6/8/2015   | 2011-7012143       | KR | Electrically Actuated Device And Method Of Controlling the Formation Of Dopants Therein               |
| 83255748     | Granted      | 10-1528180      | 1/31/2011   | 6/5/2015   | 2013-7015620       | KR | Method and Circuit for Switching a Memristive Device                                                  |
| 83256532     | Granted      | 10-1528209      | 1/31/2011   | 42160      | 2013-7014986       | KR | Method and Circuit for Switching a Memristive Device in an Array                                      |
| 83762917     | Granted      | 10-1434242      | 11/29/2013  | 41871      | 2013-7031876       | KR | Electrically Actuated Switch                                                                          |
| 83858251     | Published    | 10/21/2011      |             |            | 2014-7013577       | KR | MEMRISTIVE ELEMENT BASED ON HETERO-JUNCTION OF DIFFERENT MATERIALS                                    |
| 84020515     | Published    |                 | 4/26/2012   |            | 2014-7026691       | KR | CUSTOMIZABLE NONLINEAR ELECTRICAL DEVICES                                                             |
| 84111000     | Published    |                 | 7/27/2012   |            | 2015-7001716       | KR | STORING MEMORY WITH NEGATIVE DIFFERENTIAL RESISTANCE MATERIAL                                         |
| 90055197     | Acknowledged |                 | 3/13/2013   |            |                    | KR | MEMRISTORS WITH DOPANT-COMPENSATED SWITCHING                                                          |
| 82226642     | Granted      | 10-1386056      | 1/31/2008   | 4/10/2014  | 10-2009-7016073    | KR | Electronic And Optical Circuit Integration Through Wafer Bonding                                      |
| 82230326     | Granted      | 10-1460120      | 6/25/2008   | 11/4/2014  | 2009-7027100       | KR | Micro-electro-mechanical Systems And Photonic Interconnects Employing The Same                        |
| 82230383     | Published    |                 | 6/16/2008   |            | 2009-7026644       | KR | OPTICAL INTERCONNECT                                                                                  |
| 82230575     | Granted      | 10-1510357      | 7/16/2008   | 4/1/2015   | 2010-7001023       | KR | Optical Device Including Waveguide Grating Structure                                                  |
| 82230638     | Granted      | 10-0987885-0000 | 4/20/2007   | 10/7/2010  | 10-2008-7026289    | KR | Self-authenticating Quantum Random Bit Generators                                                     |
| 82239503     | Granted      | 10-1395169      | 1/31/2008   | 41767      | 10-2010-7019364    | KR | FREE SPACE OPTICAL INTERCONNECT                                                                       |
| 82243370     | Granted      | 10-1520130      | 10/23/2008  | 42131      | 2010-7009004       | KR | Photonic Interconnects For Computer System Devices                                                    |
| 82245491     | Granted      | 10-1448574      | 5/7/2008    | 41913      | 2010-7027526       | KR | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                      |
| 82405425     | Granted      | 10-1453136      | 5/9/2008    | 41926      | 2010-7027758       | KR | Optical Splitter Device                                                                               |
| 8254387      | Granted      | 10-1508029      | 5/23/2008   | 3/26/2015  | 2010-7029031       | KR | Optical Interconnect                                                                                  |
| 83699783     | Published    |                 | 4/20/2011   |            | 2013-7029697       | KR | SUB-WAVELENGTH GRATINGS-BASED OPTICAL ELEMENTS                                                        |
| 83734828     | Published    |                 | 5/23/2011   |            | 2013-7033074       | KR | OPTICAL TRANSMISSION SYSTEM                                                                           |
| 83770222     | Published    |                 | 6/15/2011   |            | 2013-7035177       | KR | MICRO-RING RESONATOR                                                                                  |
| 83959977     | Published    |                 | 1/31/2012   |            | 2014-7018092       | KR | OPTICAL ARCHITECTURES, OPTICAL DISTRIBUTION MATRICES, AND METHODS OF MANUFACTURING OPTICAL STRUCTURES |
| 84020538     | Published    |                 | 4/30/2012   |            | 2014-7027452       | KR | HYBRID MOS OPTICAL MODULATOR                                                                          |
| 82579356     | Granted      | 10-0943012-0000 | 4/3/2007    | 2/10/2010  | 10-2008-7026598    | KR | Merging Multi-Line Log Entries                                                                        |
| 82579548     | Granted      | 10-1451640      | 12/28/2007  | 10/10/2014 | 10-2009-7011683    | KR | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security         |
| 84076330     | Published    |                 | 7/20/2012   |            | 10-2014-7030448    | KR | MIGRATING APPLICATIONS BETWEEN NETWORKS                                                               |
| 83881898     | Published    |                 | 10/27/2011  |            | 10-2014-7011182    | KR | SHIFTABLE MEMORY EMPLOYING RING REGISTERS                                                             |
| 83991315     | Published    |                 | 3/2/2012    |            | 2014-7020610       | KR | VERSIONED MEMORIES USING A MULTI-LEVEL CELL                                                           |
| 83991570     | Published    |                 | 4/27/2012   |            | 2014-7020614       | KR | LOCAL CHECKPOINTING USING A MULTI-LEVEL CELL                                                          |

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| 82904519     | Published    |                 | 7/31/2009   |            | 2012-7002664       | KR | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                                |
| 82104950     | Granted      | 10-1088983      | 3/12/2004   | 40872      | 2004-0016892       | KR | An Interactive Service Searching Method Using Meta-data Uds(guid)system                                                           |
| 83714218     | Published    |                 | 5/31/2011   |            | 10-2013-7031661    | KR | APPLICATION SECURITY TESTING                                                                                                      |
| 82241429     | Granted      | 101397377       | 2/26/2008   | 5/13/2014  | 20107018700        | KR | Method And Apparatus For Performing A Host Enumeration Process                                                                    |
| 84075969     | Published    |                 | 7/27/2012   |            | 2014-7030428       | KR | SYSTEMS AND METHODS FOR DETECTING A DIMM SEATING ERROR                                                                            |
| 90022725     | Application  |                 | 3/27/2013   |            | 2015-7026806       | KR | Non-Volatile Memory Based Synchronous Logic                                                                                       |
| 90028922     | Acknowledged |                 | 4/2/2013    |            |                    | KR | STATE-RETAINING LOGIC CELL                                                                                                        |
| 82579373     | Granted      | 10-1519936      | 10/25/2007  | 42131      | 2009-7004991       | KR | Tracking Changing State Data To Assist In Computer Network Security                                                               |
| 83784122     | Published    |                 | 10/20/2011  |            | 10-2014-7006262    | KR | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS BASED ON A REFERENCE BASELINE ACCORDING TO TEMPORAL POSITION IN A SEQUENCE OF EVENTS |
|              |              |                 |             |            | 10-2014-7030759    | KR | POLICY-BASED SCALING OF NETWORK RESOURCES                                                                                         |
| 84077649     | Published    |                 | 7/20/2012   |            | 2007-7027373       | KR | Nanoscale Interconnection Interface                                                                                               |
| 82195853     | Granted      | 1224295         | 4/26/2006   | 1/14/2013  | 2012-7027269       | KR | NANOSCALE SWITCHING DEVICES WITH PARTIALLY OXIDIZED ELECTRODES                                                                    |
| 83099509     | Published    |                 | 4/19/2010   |            | 2013-7009542       | KR | DEVICE STRUCTURE FOR LONG ENDURANCE MEMRISTORS                                                                                    |
| 83215490     | Granted      | 10-1474812      | 9/27/2010   | 12/15/2014 | 2013-7013370       | KR | MEMRISTIVE DEVICES AND MEMRISTORS WITH RIBBON-LIKE JUNCTIONS AND METHODS FOR FABRICATING THE SAME                                 |
| 83243067     | Published    |                 | 10/29/2010  |            |                    |    |                                                                                                                                   |
| 83863051     | Published    |                 | 11/4/2011   |            | 2014-7012163       | KR | DECODER CIRCUITS HAVING METAL-INSULATOR-METAL THRESHOLD SWITCHES                                                                  |
| 83960011     | Published    |                 | 2/29/2012   |            | 2014-7021056       | KR | Memristor with Channel Region in Thermal Equilibrium with Containing Region                                                       |
| 82219142     | Granted      | 10-0965970-0000 | 4/20/2007   | 6/16/2010  | 10-2008-7025644    | KR | Optical-based, Self-authenticating Quantum Random Number Generators                                                               |
| 82242680     | Granted      | 10-1443729      | 4/2/2008    | 41899      | 2010-7022137       | KR | PRISM BEAMSPLITTERS                                                                                                               |
| 82595686     | Granted      | 10-1464285      | 7/25/2008   | 41960      | 2011-7001879       | KR | Light-emitting Devices                                                                                                            |
| 82654458     | Granted      | 10-1515870      | 9/4/2008    | 4/22/2015  | 2011-7007804       | KR | Dielectric Waveguide Intersection With Reduced Losses                                                                             |
| 82716719     | Granted      | 10-1485218      | 10/31/2008  | 42019      | 2011-7012109       | KR | Optical Broadcast With Buses With Shared Optical Interfaces                                                                       |
| 82790058     | Granted      | 10-1464031      | 1/9/2009    | 11/14/2014 | 2011-7018511       | KR | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                         |
| 82844167     | Granted      | 10-1552892      | 3/23/2009   | 42255      | 2011-7025147       | KR | INDIRECT-BANDGAP-SEMICONDUCTOR, LIGHT-EMITTING DIODE                                                                              |
| 83277648     | Published    |                 | 1/7/2011    |            | 10-2013-7016872    | KR | DYNAMIC OPTICAL CROSSBAR ARRAY                                                                                                    |

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| 832/8375     | Published    |               | 1/21/2011   |            | 2013-7017807 KR    | KR | WAVEFRONT SYNTHESIZER SYSTEMS                                                                                                                                |
| 83791132     | Published    |               | 7/29/2011   |            | 2014-7004037 KR    | KR | FIBER OPTICS CONNECTORS                                                                                                                                      |
| 83821165     | Published    |               | 8/31/2011   |            | 10-2014-7007735 KR | KR | Thermal Shunt                                                                                                                                                |
| 83930207     | Published    |               | 12/9/2011   |            | 2014-7014575 KR    | KR | Control of Light Wavefronts                                                                                                                                  |
| 83948859     | Published    |               | 1/18/2012   |            | 2014-7016505 KR    | KR | INTEGRATED SUB-WAVELENGTH GRATING ELEMENT                                                                                                                    |
| 83951478     | Published    |               | 1/18/2012   |            | 2014-7016773 KR    | KR | HIGH DENSITY LASER OPTICS                                                                                                                                    |
| 83992431     | Published    |               | 4/25/2012   |            | 2014-7020907 KR    | KR | ANALYZING LIGHT BY MODE INTERFERENCE                                                                                                                         |
| 83992451     | Published    |               | 4/26/2012   |            | 2014-7021302 KR    | KR | OPTICAL SLAB                                                                                                                                                 |
| 84076009     | Published    |               | 5/29/2012   |            | 2014-7032499 KR    | KR | DEVICES INCLUDING INDEPENDENTLY CONTROLLABLE ABSORPTION REGION AND MULTIPLICATION REGION                                                                     |
|              |              |               |             |            |                    |    | ELECTRIC FIELDS                                                                                                                                              |
| 84112926     | Published    |               | 7/30/2012   |            | 2015-7001824 KR    | KR | OPTICAL WAVEGUIDE                                                                                                                                            |
| 90028739     | Application  |               | 8/21/2015   |            | 20157022799 KR     | KR | PHOTONIC WAVEGUIDE                                                                                                                                           |
| 90041285     | Application  |               | 9/11/2015   |            | 1020157025026 KR   | KR | COUPLED RING RESONATOR SYSTEM                                                                                                                                |
| 90041308     | Application  |               | 9/11/2015   |            | 1020157025027 KR   | KR | BACKLIGHT HAVING COLLIMATING REFLECTOR                                                                                                                       |
| 90041328     | Application  |               | 9/23/2015   |            | 1020157026338 KR   | KR | MODE CONVERSION FOR OPTICAL ISOLATION                                                                                                                        |
| 8223513      | Granted      | 10-1409310    | 3/21/2008   | 41802      | 10-2009-7021905 KR | KR | Three-dimensional Crossbar Array Systems And Methods For Writing Information To And Reading Information Stored In Three-dimensional Crossbar Array Junctions |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 82242551     | Granted      | 10-1388801    | 3/10/2008   | 41746      | 2010-7022611 KR    | KR | Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same                                                                    |
| 82728103     | Published    |               | 12/19/2008  |            | 2011-7014054 KR    | KR | Redundant Data Storage For Uniform Read Latency                                                                                                              |
| 83769031     | Published    |               | 7/27/2011   |            | 10-2014-7002368 KR | KR | Efficient Data-Storage Devices that Include Memory Elements Characterized by Potentially Large Switching Latencies                                           |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 83998863     | Published    |               | 1/30/2012   |            | 2014-7021355 KR    | KR | WORD SHIFT STATIC RANDOM ACCESS MEMORY (WS-SRAM)                                                                                                             |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 84077669     | Published    |               | 5/31/2012   |            | 2014-7030518 KR    | KR | LOCAL ERROR DETECTION AND GLOBAL ERROR CORRECTION                                                                                                            |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 83933616     | Published    |               | 10/31/2011  |            | 10-2014-7014481 KR | KR | EMAIL TAGS                                                                                                                                                   |
| 82675345     | Allowed      |               | 11/13/2009  |            | 2011-7012823 KR    | KR | Data Centre And Apparatus And Method For Data Centre Cooling                                                                                                 |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 84106259     | Published    |               | 5/24/2012   |            | 2014-7032746 KR    | KR | Fiber Connector Assembly                                                                                                                                     |
| 90056384     | Acknowledged |               | 4/3/2013    |            |                    | KR | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                                                                  |
| 82103636     | Granted      | 10-1099960    | 12/21/2004  | 12/21/2011 | 2004-0109292 KR    | KR | Method And Apparatus For Reducing Soft Errors                                                                                                                |
| 82238174     | Granted      | 10-1408390    | 4/28/2008   | 41800      | 10-2010-7024255 KR | KR | Adjustable Server-transmission Rates Over Fixed-speed Backplane Connections Within A Multi-server Enclosure                                                  |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 82241606     | Granted      | 10-1445434    | 4/28/2008   | 41904      | 2010-7024309 KR    | KR | Virtual-interrupt-mode Interface And Method For Virtualizing An Interrupt Mode                                                                               |
|              |              |               |             |            |                    |    |                                                                                                                                                              |
| 84060082     | Published    |               | 4/27/2012   |            | 2014-7029986 KR    | KR | SHIELDING A MEMORY DEVICE                                                                                                                                    |

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|--------------|-------------|-----------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------|
| 82201901     | Granted     | 10-0989971-0000 | 11/8/2006   |            | 10-2008-7012213    | KR | Control Layer For A Nanoscale Electronic Switching Device                                                              |
| 82918782     | Granted     | 10-1530118      | 7/10/2009   | 42167      | 2012-7003636       | KR | MEMRISTIVE JUNCTION WITH INTRINSIC RECTIFIER                                                                           |
| 83778620     | Granted     | 10-1515874      | 6/24/2011   | 42116      | 2014-7001426       | KR | HIGH-RELIABILITY HIGH-SPEED MEMRISTOR                                                                                  |
| 83992322     | Published   |                 | 3/16/2012   |            | 2014-7020735       | KR | VARIED MULTILAYER MEMRISTIVE DEVICE                                                                                    |
| 84193767     | Application |                 | 1/18/2013   |            | 2015-7017740       | KR | INTERCONNECTION ARCHITECTURE FOR MULTILAYER CIRCUITS                                                                   |
| 82226999     | Granted     | 10-1409309      | 1/10/2008   | 6/12/2014  | 10-2009-7014487    | KR | Capacitively Coupling Layers Of A Multilayer Device                                                                    |
| 82230554     | Published   |                 | 6/16/2008   |            | 2009-7026489       | KR | Optical Interconnect                                                                                                   |
| 82232495     | Published   |                 | 7/30/2008   |            | 2010-7004542       | KR | Photonic Guiding Device                                                                                                |
| 82234613     | Granted     | 10-1546692      | 10/15/2008  | 42234      | 2010-7008315       | KR | METHOD AND SYSTEM OF TRACKING OPTICAL BEAM SHIFT                                                                       |
| 82238546     | Granted     | 10-1434238      | 1/30/2008   | 8/20/2014  | 2010-7019098       | KR | NANOSTRUCTURES AND METHODS OF MAKING THE SAME                                                                          |
| 83791163     | Published   |                 | 7/29/2011   |            | 2014-7004189       | KR | OPTICAL POWER SPLITTERS                                                                                                |
| 83821216     | Published   |                 | 8/31/2011   |            | 2014-7007865       | KR | MULTIMODE FIBER FOR MODULATABLE SOURCE                                                                                 |
| 83852059     | Published   |                 | 9/30/2011   |            | 2014-7009790       | KR | OPTICAL POWER SPLITTER INCLUDING A ZIG-ZAG                                                                             |
| 83862172     | Published   |                 | 11/1/2011   |            | 2014-7011909       | KR | DIRECT MODULATED LASER                                                                                                 |
| 83930304     | Published   |                 | 12/9/2011   |            | 2014-7014567       | KR | Optical Connections                                                                                                    |
| 83959816     | Published   |                 | 1/31/2012   |            | 2014-7017867       | KR | COMBINATION UNDERFIL-DAM AND ELECTRICAL-INTERCONNECT STRUCTURE FOR AN OPTO-ELECTRONIC ENGINE                           |
| 84076106     | Published   |                 | 7/25/2012   |            | 2014-7030649       | KR | Avalanche Photodiodes with Defect-assisted Silicon Absorption Regions                                                  |
| 84136979     | Published   |                 | 7/31/2012   |            | 2015-7002540       | KR | NETWORK TRAFFIC PROCESSING SYSTEM                                                                                      |
| 82579304     | Granted     | 10-1007899-0000 | 5/4/2005    | 1/6/2011   | 10-2006-7025550    | KR | Pattern Discovery In A Network Security System                                                                         |
| 82235054     | Granted     | 10-1492299      | 10/23/2008  | 42039      | 2010-7009006       | KR | All Optical Fast Distributed Arbitration In A Computer System Device                                                   |
| 82621133     | Granted     | 10-1467623      | 8/8/2008    | 41968      | 2011-7005394       | KR | Independently Controlled Virtual Memory Devices In Memory Modules                                                      |
| 84118244     | Published   |                 | 6/28/2012   |            | 2014-7036603       | KR | Multi-Level Cell Memory                                                                                                |
| 90037369     | Application |                 | 3/12/2013   |            | 2015-7024834       | KR | PROGRAMMABLE ADDRESS MAPPING AND MEMORY ACCESS OPERATIONS                                                              |
| 84076355     | Published   |                 | 6/25/2012   |            | 2014-7030626       | KR | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                                                             |
| 82253201     | Granted     | 252243          | 4/23/2002   | 39422      | PA/a/2003/009712   | MX | Method And System For Reporting XML Data Based On Precomputed Context And A Document Object Model                      |
| 82253627     | Granted     | 245107          | 7/19/2002   | 39191      | PA/a/2004/000592   | MX | Method and System for Weld Process Monitoring                                                                          |
| 82254152     | Granted     | 257485          | 6/12/2003   | 39597      | PA/a/2004/010670   | MX | Multi-Tiered Enterprise Management System And Method Including A Presentation Services Unit External To The Enterprise |
| 82254521     | Granted     | 251524          | 12/12/2002  | 11/15/2007 | PA/a/2004/005929   | MX | System and Method for Managing Wireless Vehicular Communications                                                       |



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| 82254758     | Granted | 256124        | 11/21/2003  |            | PA/a/2005/005225   | MX | Implementing Geo-fencing on Mobile Device                                                                              |
| 82254962     | Granted | 252293        | 12/3/2003   | 12/7/2007  | PA/a/2005/005958   | MX | METHOD AND SYSTEM FOR WELD PROCESS MONITORING                                                                          |
| 82271105     | Granted | 220719        | 2/26/1999   | 38140      | PA/a/2000/008324   | MX | Multi Position Telephone Unit                                                                                          |
| 82271186     | Granted | 218454        | 11/30/1999  | 37993      | PA/a/2000/007549   | MX | Telecommunication Conferencing System And Method                                                                       |
| 82253558     | Granted | 250877        | 12/6/2002   | 39381      | PA/a/2004/005591   | MX | Network User Authentication System And Method                                                                          |
| 82256297     | Granted | 255472        | 2/7/2005    | 3/19/2008  | PA/a/2006/009123   | MX | System and Method for Testing a Clamping Force                                                                         |
| 82252862     | Granted | 205711        | 10/29/1997  | 12/18/2001 | PA/a/1999/003748   | MX | Fail-Safe Event Driven Transaction Processing System and Method                                                        |
| 82253483     | Granted | 247659        | 10/15/2002  | 7/31/2007  | PA/a/2004/003537   | MX | Method and System for Communicating Telematics Messages                                                                |
| 82271135     | Granted | 219751        | 11/30/1999  | 4/7/2004   | PA/a/2000/007550   | MX | Telecommunication Apparatus And Method For Forwarding Packets Using Separate Collision Domains                         |
| 82251533     | Granted | 209053        | 2/12/1996   | 37456      | PA/a/1997/006084   | MX | System and Method for Electronic Transfer of Funds Using An Automated Teller Machine to Dispense the Transferred Funds |
| 82255592     | Granted | 256126        | 1/22/2004   | 4/9/2008   | PA/a/2005/007575   | MX | SYSTEM AND METHOD FOR AUTOMATED CODE GENERATION USING LANGUAGE NEUTRAL SOFTWARE CODE                                   |
| 81942218     | Granted | MV-114126-A   | 7/6/1994    | 8/30/2002  | P194001754         | MY | Shock Damage Avoidance By Fall Detection And Protective Act In A Disk Drive                                            |
| 82251587     | Granted | 811211        | 2/12/1996   | 10/16/2002 | 96906429.4         | NL | System and Method for Electronic Transfer of Funds Using An Automated Teller Machine to Dispense the Transferred Funds |
| 82721363     | Granted | 985298        | 5/28/1998   | 3/30/2011  | 98923848           | NL | Method And Apparatus For Providing Security In A Star Network Connection Using Public Key Cryptography                 |
| 84022797     | Granted | 2374250       | 1/19/2009   | 10/29/2014 | 9838521.4          | NL | Load Balancing                                                                                                         |
| 84155343     | Granted | 2497023       | 11/2/2009   | 2/25/2015  | 9850993.8          | NL | Multiprocessing Computing With Distributed Embedded Switching                                                          |
| 83185314     | Granted | 1715488       | 12/17/1998  | 2/11/2009  | 6011296.8          | NL | Tape Leader Pin Assembly And Method For Making The Same                                                                |
| 82066865     | Granted | 815677        | 1/17/1997   | 3/16/2005  | 97900685.5         | NL | Multicarrier Communication System And Method For Peak Power Control                                                    |
| 82012856     | Granted | 757351        | 6/10/1996   | 8/16/2001  | 96109263.2         | NL | Computer Frame Structure With Modular Housing                                                                          |
| 82251956     | Granted | 509240        | 7/15/1999   | 3/3/2003   | 509240             | NZ | System and Method for Selectively Defining Access to Application Features                                              |
| 82253561     | Granted | 533457        | 12/6/2002   | 7/13/2006  | 533457             | NZ | Network User Authentication System And Method                                                                          |
| 82579374     | Granted | 574567        | 10/25/2007  | 5/25/2012  | 574567             | NZ | Tracking Changing State Data To Assist In Computer Network Security                                                    |
| 82579549     | Granted | 577198        | 12/28/2007  | 3/30/2012  | 577198             | NZ | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security                          |

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| 84162981     | Application |               | 8/30/2012   |            | 705217             | NZ  | ENCRYPTED DATA STORE FOR RECORDS                                                                                       |
| 84163287     | Application |               | 9/12/2012   |            | 705270             | NZ  | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                                                        |
| 84164197     | Application |               | 9/12/2012   |            | 705222             | NZ  | METADATA TREE WITH KEY ROTATION INFORMATION                                                                            |
| 84208496     | Application |               | 9/30/2012   |            | 706475             | NZ  | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                                  |
| 84078895     | Application |               | 6/8/2012    |            | 701084             | NZ  | PATIENT INFORMATION INTERFACE                                                                                          |
| 84237781     | Application |               | 10/31/2012  |            | 707675             | NZ  | Patient oriented hospital care approach and system                                                                     |
| 82579305     | Granted     | 550752        | 5/4/2005    | 1/7/2010   | 550752             | NZ  | Pattern Discovery In A Network Security System                                                                         |
| 82252736     | Granted     | 332074        | 3/27/1997   | 5/27/1999  | 332074             | NZ  | Automated System and Method for Checkless Check Transaction                                                            |
| 84164264     | Application |               | 9/19/2012   |            | 705211             | NZ  | METADATA TREE OF A PATIENT WITH LOCKBOXES                                                                              |
| 82251539     | Granted     | 303483        | 2/12/1996   | 36033      | 303483             | NZ  | System and Method for Electronic Transfer of Funds Using An Automated Teller Machine to Dispense the Transferred Funds |
| 82252472     | Granted     | 323283        | 11/18/1996  | 36301      | 323283             | NZ  | System and Method for Accounting of Computer Data Storage Utilization                                                  |
| 82948277     | Granted     | 326982        | 12/31/1996  | 36658      | 326982             | NZ  | EVALUATION OF CONTENT OF A DATA SET USING MULTIPLE AND/OR COMPLEX QUERIES                                              |
| 83097209     | Published   |               | 4/29/2013   |            | PCT/CN2013/075021  | PCT | HOST MOBILITY MESSAGING                                                                                                |
| 83099513     | Published   |               | 1/31/2013   |            | PCT/US2013/024097  | PCT | SELECTING CIRCUITS OF A MULTI-LEVEL INTEGRATED CIRCUIT                                                                 |
| 83100627     | Published   |               | 1/31/2013   |            | PCT/CN2013/071180  | PCT | Memory Efficient Dynamic Indexed Shape Graph for Routing Tables                                                        |
| 83105820     | Published   |               | 3/14/2013   |            | PCT/US2013/031600  | PCT | MULTIVERSIONED NONVOLATILE MEMORY HIERARCHY FOR PERSISTENT MEMORY                                                      |
| 83139723     | Published   |               | 1/31/2013   |            | PCT/CN2013/000106  | PCT | Generating a Hint for a Query                                                                                          |
| 83139734     | Published   |               | 1/31/2013   |            | PCT/CN2013/000108  | PCT | Event Log System                                                                                                       |
| 83139794     | Published   |               | 1/31/2013   |            | PCT/US2013/024072  | PCT | NETWORK CONTROLLER PROVISIONED MACSEC KEYS                                                                             |
| 83140126     | Published   |               | 1/30/2013   |            | PCT/US2013/023792  | PCT | CONTROLLING A TOPOLOGY OF A NETWORK                                                                                    |
| 83140349     | Published   |               | 1/23/2013   |            | PCT/US2013/022672  | PCT | Balancing Access Point Workloads                                                                                       |
| 83140516     | Published   |               | 1/18/2013   |            | PCT/CN2013/070639  | PCT | PREVENTING AN INPUT/OUTPUT BLOCKING ATTACK TO A WIRELESS ACCESS POINT                                                  |
| 83140945     | Published   |               | 3/31/2013   |            | PCT/US2013/034749  | PCT | SCHEDULE FOR ACCESS TO SHARED WIRELESS MEDIUM BASED ON PROFILE DATA                                                    |
| 83141563     | Published   |               | 5/29/2013   |            | PCT/US2013/043191  | PCT | WRITABLE DEVICE BASED ON ALTERNATING CURRENT                                                                           |
| 83148980     | Published   |               | 4/16/2013   |            | PCT/US2013/036796  | PCT | DISTRIBUTED EVENT CORRELATION SYSTEM                                                                                   |
| 83153047     | Published   |               | 6/28/2013   |            | PCT/US2013/048759  | PCT | Fault Tolerance for Persistent Main Memory                                                                             |

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| 83167064     | Published |               | 4/2/2013    |            | PCT/US2013/035008  | PCT | SHARING A WEB BROWSER SESSION BETWEEN DEVICES OF A SOCIAL GROUP                                                      |
| 83167088     | Published |               | 4/3/2013    |            | PCT/US2013/035133  | PCT | DEVICE PAIRING FOR CONTENT SHARING                                                                                   |
| 83199238     | Published |               | 7/4/2013    |            | PCT/CN2013/078800  | PCT | DETERMINING A LEGITIMATE ACCESS POINT RESPONSE                                                                       |
| 83200380     | Published |               | 6/18/2013   |            | PCT/US2013/046401  | PCT | CONFIRM PROPER SEATING<br>OF A DUAL INLINE MEMORY MODULE                                                             |
| 83200481     | Published |               | 5/22/2013   |            | PCT/US2013/042261  | PCT | OPTICAL DEVICES INCLUDING A HIGH CONTRAST GRATING LENS                                                               |
| 83204391     | Published |               | 4/30/2013   |            | PCT/US2013/038870  | PCT | GROUPING CHUNKS OF DATA INTO A COMPRESSION REGION                                                                    |
| 83204545     | Published |               | 8/27/2013   |            | PCT/US2013/056722  | PCT | TRAVEL TIME AND ROUTING                                                                                              |
| 83204549     | Published |               | 5/29/2013   |            | PCT/US2013/043027  | PCT | PASSIVE SECURITY OF APPLICATIONS                                                                                     |
| 83204568     | Published |               | 6/19/2013   |            | PCT/RU2013/000520  | PCT | DOCUMENT TOPIC IDENTIFICATION                                                                                        |
| 83204580     | Published |               | 7/19/2013   |            | PCT/US2013/051311  | PCT | VIRTUAL MACHINE RESOURCE MANAGEMENT SYSTEM AND METHOD THEREOF                                                        |
| 83204585     | Published |               | 7/19/2013   |            | PCT/US2013/051328  | PCT | Map with Different Degrees of Overlapping Geocoded Pixels                                                            |
| 83204648     | Published |               | 6/12/2013   |            | PCT/US2013/045416  | PCT | DISTRIBUTED WORKER-SOURCED PROCESS ENGINEERING                                                                       |
| 83204675     | Published |               | 6/20/2013   |            | PCT/US2013/046849  | PCT | GENERATING A FINGERPRINT REPRESENTING A RESPONSE OF AN APPLICATION TO A SIMULATION OF A FAULT OF AN EXTERNAL SERVICE |
| 83204694     | Published |               | 6/28/2013   |            | PCT/US2013/048567  | PCT | SIMULATING SENSORS                                                                                                   |
| 83204754     | Published |               | 4/12/2013   |            | PCT/US2013/036501  | PCT | LOCATION DETERMINATION OF A MOBILE DEVICE                                                                            |
| 83204809     | Published |               | 6/28/2013   |            | PCT/US2013/048578  | PCT | EXPIRATION TAG OF DATA                                                                                               |
| 83205141     | Published |               | 4/24/2013   |            | PCT/US2013/038017  | PCT | LOCATION SIGNATURES                                                                                                  |
| 83205150     | Published |               | 4/24/2013   |            | PCT/US2013/038023  | PCT | DISPLACEMENT SIGNATURES                                                                                              |
| 83205195     | Published |               | 6/3/2013    |            | PCT/IN2013/000352  | PCT | RESTORING A FILE SYSTEM OBJECT                                                                                       |
| 83205315     | Published |               | 9/26/2013   |            | PCT/US2013/061902  | PCT | CONTROLLING USAGE OF RESOURCES BASED ON OPERATING STATUS AND COMMUNICATIONS                                          |
| 83205361     | Published |               | 6/27/2013   |            | PCT/US2013/048185  | PCT | USER INTERFACE CONFORMANCE                                                                                           |
| 83205367     | Published |               | 6/27/2013   |            | PCT/US2013/048112  | PCT | PAYMENT PROCESSING                                                                                                   |
| 83205959     | Published |               | 6/28/2013   |            | PCT/US2013/048777  | PCT | MEMORY COMPONENT CAPABLE TO COMMUNICATE AT MULTIPLE DATA WIDTHS                                                      |
| 83206128     | Published |               | 5/31/2013   |            | PCT/US2013/043686  | PCT | MEMORY ERROR DETERMINATION                                                                                           |
| 83206821     | Published |               | 6/27/2013   |            | PCT/IN2013/000398  | PCT | Assessing Value of A Brand Based On Online Content                                                                   |
| 83207820     | Published |               | 7/31/2013   |            | PCT/US2013/052990  | PCT | DATA MOVE ENGINE TO MOVE A BLOCK OF DATA                                                                             |
| 83207854     | Published |               | 4/30/2013   |            | PCT/CN2013/075033  | PCT | TOP-K Prefix Histogram Construction for String Data                                                                  |

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| 83209059     | Published |               | 5/20/2013   |            | PCT/US2013/041879  | PCT | Determining Demand of a Company                                                 |
| 83209245     | Published |               | 4/30/2013   |            | PCT/US2013/038738  | PCT | DEPENDENCIES BETWEEN FEATURE FLAGS                                              |
| 83209620     | Published |               | 4/30/2013   |            | PCT/US2013/038857  | PCT | Coordinating Application Deployment with a Platform The                         |
| 83210525     | Published |               | 4/30/2013   |            | PCT/US2013/038937  | PCT | MEMORY NETWORK                                                                  |
| 83210563     | Published |               | 4/30/2013   |            | PCT/US2013/038936  | PCT | MEMORY NODE ERROR CORRECTION                                                    |
| 83211155     | Published |               | 5/16/2013   |            | PCT/US2013/041360  | PCT | REPORTING DEGRADED STATE OF DATA RETRIEVED FOR<br>DISTRIBUTED OBJECT            |
| 83211336     | Published |               | 5/14/2013   |            | PCT/US2013/040970  | PCT | Detection of a Security Event                                                   |
| 83213729     | Published |               | 5/30/2013   |            | PCT/US2013/043276  | PCT | DISABLING AND INITIATING NODES<br>BASED ON SECURITY ISSUE                       |
|              |           |               |             |            |                    |     |                                                                                 |
| 83215517     | Published |               | 5/29/2013   |            | PCT/US2013/043157  | PCT | AUX POWER CONTROLLER                                                            |
| 83216293     | Published |               | 4/3/2013    |            | PCT/US2013/035147  | PCT | ZONEABLE POWER REGULATION                                                       |
| 83254172     | Published |               | 6/4/2013    |            | PCT/US2013/044036  | PCT | IDENTIFYING RELEVANT CONTENT FOR DATA GATHERED<br>FROM REAL TIME COMMUNICATIONS |
| 83260632     | Published |               | 5/30/2013   |            | PCT/US2013/043414  | PCT | SECURITY APPARATUS TO HOUSE A DEVICE                                            |
| 83266011     | Published |               | 11/15/2013  |            | PCT/US2013/070291  | PCT | MEMORY MODULE LATCHES AND ELECTORS                                              |
| 83266040     | Published |               | 6/7/2013    |            | PCT/US2013/044820  | PCT | TARGET CHANNEL IDENTIFICATION FOR A WIRELESS<br>COMMUNICATION                   |
| 83266057     | Published |               | 8/28/2013   |            | PCT/US2013/057094  | PCT | Refresh Rate Adjust                                                             |
| 83266580     | Published |               | 8/22/2013   |            | PCT/US2013/056269  | PCT | PASSIVE DEVICE TO RECEIVE A CONTROL INPUT AND SUPPLY<br>OUTPUT POWER            |
| 83266586     | Published |               | 11/15/2013  |            | PCT/US2013/070450  | PCT | PRODUCT DATA ANALYSIS                                                           |
| 83266595     | Published |               | 7/29/2013   |            | PCT/US2013/052461  | PCT | DATABASE ANALYSIS AND VALIDATION                                                |
| 83266600     | Published |               | 7/30/2013   |            | PCT/US2013/052773  | PCT | CONNECTOR FOR A COMPUTING ASSEMBLY                                              |
| 83267336     | Published |               | 8/30/2013   |            | PCT/US2013/057669  | PCT | LOCALIZATION USING TIME-OF-FLIGHT                                               |
| 83267356     | Published |               | 9/16/2013   |            | PCT/US2013/059935  | PCT | SWITCHING RESISTANCE MEMORY DEVICES WITH<br>INTERFACIAL CHANNELS                |
| 83267809     | Published |               | 6/26/2013   |            | PCT/US2013/047765  | PCT | Modifying an Analytic Flow                                                      |
| 83267814     | Published |               | 6/24/2013   |            | PCT/US2013/047252  | PCT | GENERATING A LOGICAL REPRESENTATION FROM A PHYSICAL<br>FLOW                     |
| 83267835     | Published |               | 11/13/2013  |            | PCT/US2013/069782  | PCT | WORKFLOW CHANGE IMPACT                                                          |
| 83268558     | Published |               | 7/31/2013   |            | PCT/US2013/053012  | PCT | Data Stream Processing Using a Distributed Cache                                |
| 83268625     | Published |               | 9/30/2013   |            | PCT/US2013/062557  | PCT | NO ROLLBACK THRESHOLD FOR AUDIT TRAIL                                           |
| 83268665     | Published |               | 11/5/2013   |            | PCT/US2013/068546  | PCT | Forum Inspection Based on Correlation Rating of Response<br>Poster              |
| 83268676     | Published |               | 8/28/2013   |            | PCT/US2013/057002  | PCT | MANAGING A PRESENTATION                                                         |

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| 83268688     | Published   |               | 6/27/2013   |            | PCT/US2013/048321  | PCT | DEVICE FOR DISPLAYING ELECTRONIC COMMUNICATIONS RECEIVED FROM COMMUNICATIONS SERVICES                  |
| 83268745     | Published   |               | 7/22/2013   |            | PCT/US2013/051522  | PCT | HEAT SINK                                                                                              |
| 83268871     | Published   |               | 8/30/2013   |            | PCT/US2013/057738  | PCT | MAINTAIN A SERVICE ON A CLOUD NETWORK BASED ON SCALE RULE                                              |
| 83268876     | Published   |               | 9/30/2013   |            | PCT/US2013/062535  | PCT | CALL HANDLING AND SCHEDULING BASED ON A SET OF RULES                                                   |
| 83268917     | Published   |               | 9/6/2013    |            | PCT/US2013/058415  | PCT | MANAGING A SENSORY FACTOR                                                                              |
| 83268925     | Published   |               | 9/13/2013   |            | PCT/IN2013/000557  | PCT | Intelligent Auto-Scaling                                                                               |
| 83268933     | Published   |               | 9/30/2013   |            | PCT/US2013/062695  | PCT | TRACING SOURCE CODE FOR END USER MONITORING                                                            |
| 83268968     | Published   |               | 8/29/2013   |            | PCT/IN2013/000528  | PCT | Automatically Configuring A Virtual Router                                                             |
| 83269160     | Published   |               | 9/20/2013   |            | PCT/US2013/060998  | PCT | SNAPSHOT MESSAGE                                                                                       |
| 83269197     | Application |               | 6/28/2013   |            | PCT/US2013/048449  | PCT | INTERRUPTION OF OUTPUT POWER AND AUXILIARY POWER                                                       |
| 83269229     | Published   |               | 8/30/2013   |            | PCT/US2013/057735  | PCT | ZEROZONE PROFILE TRANSFERRING TO ENABLE FAST ROAMING                                                   |
| 83269260     | Published   |               | 7/9/2013    |            | PCT/US2013/049654  | PCT | WRITE FLOW CONTROL FOR MEMORY MODULES THAT INCLUDE OR INTERFACE WITH NON-COMPLIANT MEMORY TECHNOLOGIES |
| 83269271     | Published   |               | 7/25/2013   |            | PCT/US2013/052031  | PCT | RESPONSE CONTROL FOR MEMORY MODULES THAT INCLUDE OR INTERFACE WITH NON-COMPLIANT MEMORY TECHNOLOGIES   |
| 83269377     | Published   |               | 6/21/2013   |            | PCT/US2013/047050  | PCT | ADAPTIVE LOCATION PERTURBATION                                                                         |
| 83269400     | Published   |               | 11/15/2013  |            | PCT/US2013/070320  | PCT | IDENTIFYING A CONFIGURATION ELEMENT VALUE AS A POTENTIAL CAUSE OF A TESTING OPERATION FAILURE          |
| 83269414     | Published   |               | 11/12/2013  |            | PCT/US2013/069754  | PCT | Augmented Reality Marker                                                                               |
| 83269418     | Published   |               | 11/15/2013  |            | PCT/US2013/070308  | PCT | INDICATING A TRAIT OF A CONTINUOUS DELIVERY PIPELINE                                                   |
| 83269440     | Published   |               | 11/27/2013  |            | PCT/US2013/072390  | PCT | PRODUCTION SAMPLING FOR DETERMINING CODE COVERAGE                                                      |
| 83269896     | Published   |               | 8/30/2013   |            | PCT/US2013/057678  | PCT | COMPLETION PACKET RETURN                                                                               |
| 83269907     | Published   |               | 11/14/2013  |            | PCT/US2013/070125  | PCT | MARK CACHE ENTRY                                                                                       |
| 83269913     | Published   |               | 9/23/2013   |            | PCT/US2013/061139  | PCT | WORKFLOW AND USER CREDENTIALS                                                                          |
| 83269930     | Published   |               | 6/24/2013   |            | PCT/US2013/047330  | PCT | CONTEXTUAL-BASED LOCALIZATION BASED ON MANUAL TESTING                                                  |
| 83269938     | Application |               | 9/30/2013   |            | PCT/US2013/062639  | PCT | OVERLAYS TO MODIFY DATA OBJECTS OF SOURCE DATA                                                         |
| 83269947     | Published   |               | 9/19/2013   |            | PCT/US2013/060546  | PCT | APPLICATION MENU MODIFICATION RECOMMENDATIONS                                                          |
| 83269990     | Published   |               | 9/30/2013   |            | PCT/US2013/062777  | PCT | PERSONALIZED LEARNING SYSTEM AND METHOD THEREOF                                                        |
| 83269996     | Published   |               | 8/20/2013   |            | PCT/US2013/055693  | PCT | PAYMENT UNIFICATION SERVICE                                                                            |

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| 832/0259     | Published   |               | 9/24/2013   |            | PCT/US2013/061284  | PCT | SLOT BASED MANAGEMENT CONTROLLER ADDRESS BACKGROUND                                           |
| 832/0265     | Application |               | 6/25/2013   |            | PCT/US2013/047541  | PCT | POWERING NODES                                                                                |
| 832/0270     | Published   |               | 12/2/2013   |            | PCT/US2013/072600  | PCT | SYSTEM WIDE MANAGEABILITY                                                                     |
| 832/0291     | Published   |               | 8/1/2013    |            | PCT/IN2013/000476  | PCT | DIRECTORY CREATION ON FILE SYSTEM                                                             |
| 832/0305     | Published   |               | 7/31/2013   |            | PCT/US2013/053062  | PCT | COMPARING USER INTERFACES                                                                     |
| 832/0310     | Published   |               | 9/25/2013   |            | PCT/US2013/061686  | PCT | FLEXIBLE DATA FORMAT FOR DATABASE MANAGEMENT SYSTEMS                                          |
| 832/0935     | Published   |               | 7/30/2013   |            | PCT/US2013/052794  | PCT | Resource Allocator                                                                            |
| 832/0946     | Published   |               | 11/14/2013  |            | PCT/IN2013/000695  | PCT | MULTICAST DATA MANAGEMENT                                                                     |
| 832/0972     | Published   |               | 6/24/2013   |            | PCT/US2013/047285  | PCT | TENSION FEEDBACK FOR TAPE TENSION                                                             |
| 832/0980     | Published   |               | 9/30/2013   |            | PCT/US2013/062624  | PCT | HIERARCHICAL THREAT INTELLIGENCE                                                              |
| 832/1003     | Published   |               | 9/14/2013   |            | PCT/US2013/059837  | PCT | PREDICTING EXECUTION TIMES OF CONCURRENT QUERIES                                              |
| 832/1490     | Published   |               | 8/30/2013   |            | PCT/US2013/057739  | PCT | NETWORK ELEMENT STATUS IDENTIFICATION BASED ON SERVICE                                        |
| 832/1495     | Published   |               | 7/22/2013   |            | PCT/US2013/051488  | PCT | PRESENTING DATA IN A SCALABLE FORMAT                                                          |
| 832/1510     | Published   |               | 7/31/2013   |            | PCT/US2013/053087  | PCT | AUTOMATED REMOTE NETWORK TARGET COMPUTING DEVICE ISSUE RESOLUTION                             |
| 832/1596     | Published   |               | 9/23/2013   |            | PCT/IN2013/000571  | PCT | Troubleshooting Openflow Networks                                                             |
| 832/1641     | Published   |               | 7/26/2013   |            | PCT/US2013/052343  | PCT | SERVICE-LEVEL AGREEMENT ANALYSIS                                                              |
| 832/1690     | Published   |               | 7/12/2013   |            | PCT/US2013/050331  | PCT | ANALYZING TARGET SOFTWARE FOR SECURITY VULNERABILITIES                                        |
| 832/1704     | Published   |               | 7/17/2013   |            | PCT/US2013/050937  | PCT | EVENT MANAGEMENT SYSTEMS                                                                      |
| 832/1768     | Published   |               | 6/24/2013   |            | PCT/US2013/047296  | PCT | PROCESSING A DATA FLOW GRAPH OF A HYBRID FLOW                                                 |
| 832/1805     | Published   |               | 11/15/2013  |            | PCT/US2013/070409  | PCT | SELECTING AND ALLOCATING                                                                      |
| 832/1825     | Published   |               | 7/31/2013   |            | PCT/US2013/053046  | PCT | HYBRID SECURE NON-VOLATILE MAIN MEMORY                                                        |
| 832/1848     | Published   |               | 7/31/2013   |            | PCT/US2013/053098  | PCT | Advanced Versioned Memory                                                                     |
| 832/1864     | Published   |               | 8/15/2013   |            | PCT/US2013/055212  | PCT | REACTIVE DIAGNOSTICS IN STORAGE AREA NETWORKS                                                 |
| 832/2309     | Published   |               | 7/31/2013   |            | PCT/US2013/053076  | PCT | PROVIDING SUBSCRIBER OPTIONS                                                                  |
| 832/2314     | Published   |               | 8/15/2013   |            | PCT/US2013/055216  | PCT | PROACTIVE MONITORING AND DIAGNOSTICS IN STORAGE AREA NETWORKS                                 |
| 832/2340     | Published   |               | 9/4/2013    |            | PCT/US2013/058036  | PCT | PROVIDING RECURSIVELY-GENERATED INSTANTIATED COMPUTING RESOURCE IN A MULTI-TENANT ENVIRONMENT |
| 832/2352     | Published   |               | 9/4/2013    |            | PCT/US2013/058044  | PCT | POLICY BASED SELECTION OF RESOURCES FOR A CLOUD SERVICE                                       |

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| 83272409     | Published   |               | 7/31/2013   |            | PCT/US2013/052870  | PCT | CONFIGURING A COMMUNICATION INTERCONNECT FOR ELECTRONIC DEVICES                                   |
| 83272423     | Published   |               | 7/31/2013   |            | PCT/US2013/053041  | PCT | Voltage Control for Crosspoint Memory Structures                                                  |
| 83272535     | Published   |               | 7/31/2013   |            | PCT/US2013/052916  | PCT | MEMORY UNIT                                                                                       |
| 83272554     | Published   |               | 10/30/2013  |            | PCT/US2013/067570  | PCT | EXECUTION OF A TOPOLOGY                                                                           |
| 83272583     | Published   |               | 10/30/2013  |            | PCT/US2013/067492  | PCT | REALIZED TOPOLOGY SYSTEM MANAGEMENT DATABASE                                                      |
| 83273156     | Published   |               | 10/30/2013  |            | PCT/US2013/067423  | PCT | TOPOLOGY REMEDIATION                                                                              |
| 83273161     | Published   |               | 10/30/2013  |            | PCT/US2013/067414  | PCT | STITCHING AN APPLICATION MODEL TO AN INFRASTRUCTURE TEMPLATE                                      |
| 83273176     | Published   |               | 10/30/2013  |            | PCT/US2013/067406  | PCT | MANAGING THE LIFECYCLE OF A CLOUD SERVICE MODELED AS TOPOLOGY                                     |
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| 83273371     | Published   |               | 7/15/2013   |            | PCT/US2013/050547  | PCT | Rebuilding Drive Data                                                                             |
| 83273379     | Published   |               | 7/30/2013   |            | PCT/US2013/052718  | PCT | INDICATING A DIMENSION OF A SEQUENTIAL ACCESS STORAGE MEDIUM SUBJECT TO EXPANSION AND CONTRACTION |
|              |             |               |             |            |                    |     | PROCESS PARTIAL RESPONSE CHANNEL                                                                  |
| 83273413     | Published   |               | 7/30/2013   |            | PCT/US2013/052668  | PCT | SOFTWARE DEFINED OPTICAL NETWORK                                                                  |
| 83273952     | Published   |               | 9/19/2013   |            | PCT/US2013/060586  | PCT | HARD ZONING CORRESPONDING TO FLOW                                                                 |
| 83275657     | Published   |               | 6/24/2013   |            | PCT/US2013/047351  | PCT | NETWORK CONFIGURATION USING SERVICE IDENTIFIER                                                    |
| 83275666     | Published   |               | 7/26/2013   |            | PCT/US2013/052291  | PCT | SEPARATING STORAGE TRANSACTION LOGS                                                               |
| 83276216     | Published   |               | 8/29/2013   |            | PCT/US2013/057185  | PCT | FLUSHING DIRTY DATA FROM CACHE MEMORY                                                             |
| 83276224     | Published   |               | 6/25/2013   |            | PCT/US2013/047536  | PCT | CONTROLLING A PROXY TOOL WITH INJECTED WIDGET CODE                                                |
| 83276819     | Published   |               | 9/30/2013   |            | PCT/CN2013/084746  | PCT | WORK CONSERVING BANDWIDTH GUARANTEES USING PRIORITY                                               |
| 83277132     | Published   |               | 7/23/2013   |            | PCT/US2013/051674  | PCT | ADDRESS RESOLUTION REWRITING                                                                      |
|              |             |               |             |            |                    |     | DEVICE INCLUDING MIRRORS AND FILTERS TO OPERATE AS A MULTIPLEXER OR DE-MULTIPLEXER                |
| 83277630     | Published   |               | 8/1/2013    |            | PCT/IN2013/000477  | PCT | Application Control Flow Models                                                                   |
| 83278328     | Published   |               | 8/21/2013   |            | PCT/US2013/055908  | PCT | OFF-MEMORY-MODULE ECC-SUPPLEMENTAL MEMORY SYSTEM                                                  |
| 83410344     | Published   |               | 9/27/2013   |            | PCT/US2013/062168  | PCT | RAIL FOR MOUNTING A RACK-MOUNTABLE COMPONENT                                                      |
| 83410837     | Published   |               | 7/31/2013   |            | PCT/US2013/052943  | PCT | TWO-DIMENSIONAL TORUS TOPOLOGY                                                                    |
| 83417506     | Published   |               | 7/26/2013   |            | PCT/US2013/052274  | PCT | REPRESENTING NUMERICAL DATA IN A MOBILE DEVICE                                                    |
| 83421213     | Published   |               | 7/30/2013   |            | PCT/US2013/052766  | PCT | ESTIMATING DATA                                                                                   |
| 83423340     | Published   |               | 8/13/2013   |            | PCT/US2013/054696  | PCT | MULTI-BIT TRIE BASED INDEXED SHAPE GRAPH                                                          |
| 83513384     | Published   |               | 11/14/2013  |            | PCT/US2013/070083  | PCT |                                                                                                   |
| 83588838     | Published   |               | 1/27/2014   |            | PCT/CN2014/071529  | PCT |                                                                                                   |

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| 83593389     | Published   |               | 12/19/2013  |            | PCT/US2013/076493  | PCT | CONNECTOR TO SECURE A SOLID STATE DEVICE IN AN O         |
|              |             |               |             |            |                    |     | MOTHERBOARD LOCATION                                     |
| 83593450     | Published   |               | 1/10/2014   |            | PCT/US2014/011034  | PCT | CALL HOME CLUSTER                                        |
| 83593476     | Published   |               | 1/30/2014   |            | PCT/US2014/013727  | PCT | COPY MESSAGE FROM APPLICATION BUFFER TO SEND             |
|              |             |               |             |            |                    |     | BUFFER WITHIN KERNEL                                     |
| 83593481     | Published   |               | 12/17/2013  |            | PCT/US2013/075872  | PCT | A GENERIC MODEL TO IMPLEMENT A CLOUD COMPUTING           |
|              |             |               |             |            |                    |     | SERVICE                                                  |
| 83593513     | Published   |               | 12/2/2013   |            | PCT/US2013/072648  | PCT | ADJUSTABLE FAN SPEED                                     |
| 83597887     | Published   |               | 9/27/2013   |            | PCT/US2013/062321  | PCT | CONNECTOR DEVICE TO REMOVABLY CONNECT AND LOG            |
|              |             |               |             |            |                    |     | TO A FRAME                                               |
| 83597892     | Published   |               | 9/27/2013   |            | PCT/US2013/062156  | PCT | ENERGIZING A POWER SUPPLY IN RESPONSE TO A               |
|              |             |               |             |            |                    |     | DISABLEMENT OF A RELAY                                   |
| 83597924     | Application |               | 2/6/2014    |            | PCT/US2014/015165  | PCT | DISK DRIVE MODULE                                        |
| 83597929     | Application |               | 2/5/2014    |            | PCT/US2014/014840  | PCT | DISK DRIVE MODULE                                        |
| 83597973     | Published   |               | 9/5/2013    |            | PCT/US2013/058204  | PCT | MESH TOPOLOGY STORAGE CLUSTER                            |
|              |             |               |             |            |                    |     | WITH AN ARRAY BASED MANAGER                              |
|              |             |               |             |            |                    |     |                                                          |
| 83598033     | Published   |               | 12/19/2013  |            | PCT/US2013/076451  | PCT | PAYMENT TRANSACTION                                      |
| 83598056     | Published   |               | 12/16/2013  |            | PCT/US2013/075288  | PCT | TAGGING A PROGRAM CODE PORTION                           |
| 83598076     | Published   |               | 9/27/2013   |            | PCT/US2013/062201  | PCT | Processing a Hybrid Flow Associated with a Service Class |
| 83598081     | Published   |               | 12/19/2013  |            | PCT/US2013/076477  | PCT | HYBRID FLOWS CONTAINING A CONTINUOUS FLOW                |
| 83598087     | Published   |               | 10/24/2013  |            | PCT/US2013/066616  | PCT | REAL-TIME INTER-PERSONAL COMMUNICATION                   |
| 83598092     | Published   |               | 12/3/2013   |            | PCT/US2013/072725  | PCT | CODE ROUTINE PERFORMANCE PREDICTION USING TEST           |
|              |             |               |             |            |                    |     | RESULTS FROM CODE INTEGRATION TOOL                       |
|              |             |               |             |            |                    |     | RESOURCE DIRECTORY                                       |
| 83598179     | Application |               | 3/28/2014   |            | PCT/IN2014/000200  | PCT | EMULATING A USER PERFORMING SPATIAL GESTURES             |
| 83598207     | Application |               | 2/20/2014   |            | PCT/US2014/017294  | PCT | DETERMINING PREFERRED COMMUNICATION                      |
| 83598222     | Published   |               | 12/16/2013  |            | PCT/US2013/075344  | PCT | EXPLANATIONS USING RECORD-RELEVANCY TIERS                |
|              |             |               |             |            |                    |     | SYNCHRONIZING A CLOUD SERVICE TEMPLATE WITH AN           |
| 83598227     | Published   |               | 12/17/2013  |            | PCT/US2013/075794  | PCT | INFRASTRUCTURE TEMPLATE                                  |
|              |             |               |             |            |                    |     | ROLE BASED ASSESSMENT FOR AN IT MANAGEMENT SYSTEM        |
| 83598239     | Application |               | 2/19/2014   |            | PCT/US2014/017160  | PCT | EVENT-DRIVEN AUTOMATION TESTING FOR MOBILE DEVICES       |
| 83598244     | Published   |               | 11/18/2013  |            | PCT/US2013/070588  | PCT |                                                          |
|              |             |               |             |            |                    |     |                                                          |
| 83598261     | Application |               | 1/21/2014   |            | PCT/US2014/012250  | PCT | Automatically Discovering Topology Of An Information     |
|              |             |               |             |            |                    |     | Technology (IT) Infrastructure                           |
| 83598285     | Published   |               | 12/19/2013  |            | PCT/US2013/076436  | PCT | PERSONALIZED SHOPPING AND ROUTING                        |
| 83602681     | Published   |               | 9/27/2013   |            | PCT/US2013/062352  | PCT | FORWARDED LOG LINES                                      |

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| 83602687     | Published   |               | 1/31/2014   |            | PCT/US2014/014194  | PCT | DEVICE PROVIDED SCRIPT TO CONVERT COMMAND                                       |
| 83602724     | Application |               | 1/28/2014   |            | PCT/US2014/013280  | PCT | ONLINE FILE SYSTEM METADATA ANALYSIS AND CORRECTION                             |
| 83602732     | Application |               | 1/31/2014   |            | PCT/US2014/013987  | PCT | FILE SYSTEM ANALYSIS IN USER DAEMON                                             |
| 83602738     | Published   |               | 2/14/2014   |            | PCT/US2014/016435  | PCT | ASSIGN PLACEMENT POLICY TO SEGMENT SET                                          |
| 83602756     | Published   |               | 9/27/2013   |            | PCT/US2013/062371  | PCT | DATA MANAGEMENT ON MEMORY MODULES                                               |
| 83602761     | Published   |               | 12/19/2013  |            | PCT/US2013/076395  | PCT | TRANSMISSION OF COMMAND STRINGS AND STATUS STRINGS VIA MEMORY BUS               |
| 83602773     | Published   |               | 1/8/2014    |            | PCT/US2014/010691  | PCT | Dynamically Applying A Software Patch To A Computer Program                     |
| 83602795     | Published   |               | 11/27/2013  |            | PCT/US2013/072267  | PCT | AUTHORIZING APPLICATION ACCESS TO VIRTUAL PRIVATE NETWORK RESOURCE              |
| 83602822     | Published   |               | 1/15/2014   |            | PCT/CN2014/070659  | PCT | MANAGING A DISTRIBUTION OF A PAYLOAD FOR A FLIGHT                               |
| 83602913     | Published   |               | 1/29/2014   |            | PCT/US2014/013600  | PCT | END USER MONITORING TO AUTOMATE ISSUE TRACKING                                  |
| 83602948     | Published   |               | 1/10/2014   |            | PCT/CN2014/070429  | PCT | MONITORING AN OBJECT TO PREVENT AN OCCURRENCE OF AN ISSUE                       |
| 83612362     | Application |               | 10/9/2013   |            | PCT/IN2013/000611  | PCT | INFORMATION TECHNOLOGY RESOURCE PLANNING                                        |
| 83612677     | Application |               | 11/27/2013  |            | PCT/US2013/072145  | PCT | META DATA AND DATA VERIFICATION                                                 |
| 83618640     | Application |               | 11/26/2013  |            | PCT/US2013/072014  | PCT | ELECTRICAL CONNECTOR ADAPTER                                                    |
| 83618653     | Published   |               | 1/9/2014    |            | PCT/US2014/010804  | PCT | SUPPORT DATA DEPLICATION                                                        |
| 83623254     | Published   |               | 10/29/2013  |            | PCT/US2013/067194  | PCT | Validating a Query Execution                                                    |
| 83623268     | Published   |               | 10/21/2013  |            | PCT/CN2013/085580  | PCT | EXTRACT DATA FROM AN XML STREAM                                                 |
| 83623294     | Published   |               | 10/31/2013  |            | PCT/US2013/067685  | PCT | MONITORING PRINTERS                                                             |
| 83623317     | Published   |               | 10/31/2013  |            | PCT/US2013/067687  | PCT | INITIALIZING PRINTERS                                                           |
| 83623376     | Published   |               | 10/30/2013  |            | PCT/US2013/067629  | PCT | DATACENTER REPLICATION                                                          |
| 83623385     | Published   |               | 10/31/2013  |            | PCT/US2013/067703  | PCT | MEMRISTIVE DEVICE SWITCHING BY ALTERNATING POLARITY PULSES                      |
| 83623403     | Application |               | 12/20/2013  |            | PCT/US2013/076960  | PCT | DIGITAL SWITCHBOARD                                                             |
| 83623419     | Published   |               | 10/31/2013  |            | PCT/US2013/067825  | PCT | NETWORK DATABASE HOSTING                                                        |
| 83623428     | Published   |               | 10/17/2013  |            | PCT/US2013/065494  | PCT | TESTING A WEB SERVICE USING INHERITED TEST ATTRIBUTES                           |
| 83623439     | Application |               | 10/31/2013  |            | PCT/US2013/067841  | PCT | CACHE CONTROLLER FOR NON-VOLATILE MEMORY                                        |
| 83623445     | Published   |               | 10/31/2013  |            | PCT/IN2013/000677  | PCT | CLASSIFYING A DOCUMENT USING PATTERNS                                           |
| 83623451     | Published   |               | 10/29/2013  |            | PCT/US2013/067339  | PCT | OPTIMIZING A FORECAST WITH A DISAGGREGATION RATIO AT A FORECAST LEVEL           |
| 83623460     | Published   |               | 10/30/2013  |            | PCT/US2013/067541  | PCT | DETERMINING A BUSINESS STRATEGY                                                 |
| 83623523     | Published   |               | 11/27/2013  |            | PCT/CN2013/087963  | PCT | Systems and Methods for Unsupervised Joint Relation Extraction Between Entities |

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| 83623549     | Published   |               | 10/24/2013  |            | PCT/US2013/066544  | PCT | NETWORK TRAFFIC CLASSIFICATION AND REDIRECTION                      |
| 83623557     | Published   |               | 10/9/2013   |            | PCT/US2013/063978  | PCT | DISPLAYING MULTIVARIATE DATA IN MULTIPLE DIMENSIONS                 |
| 83623586     | Published   |               | 10/15/2013  |            | PCT/US2013/065116  | PCT | COUPLING-MODULATED OPTICAL RESONATOR                                |
| 83623615     | Published   |               | 9/30/2013   |            | PCT/US2013/062599  | PCT | INTERPRETING SIGNALS RECEIVED FROM REDUNDANT DEVICES                |
| 83623620     | Application |               | 10/2/2013   |            | PCT/US2013/062959  | PCT | ATTACHING CONNECTORS                                                |
| 83628995     | Application |               | 11/1/2013   |            | PCT/US2013/068073  | PCT | PROTOCOL AGNOSTIC STORAGE ACCESS IN A SOFTWARE                      |
| 83628999     | Application |               | 12/4/2013   |            | PCT/US2013/073204  | PCT | DEFINED NETWORK TOPOLOGY                                            |
| 83629056     | Published   |               | 10/30/2013  |            | PCT/CN2013/086203  | PCT | DATA SANITIZATION                                                   |
| 83629234     | Published   |               | 1/8/2014    |            | PCT/US2014/010645  | PCT | USER AUTHENTICATION                                                 |
| 83629287     | Published   |               | 10/31/2013  |            | PCT/US2013/067757  | PCT | SERVICE DISCOVERY MANAGEMENT                                        |
| 83629310     | Published   |               | 10/31/2013  |            | PCT/US2013/067756  | PCT | COMPRESSING AND COMPACTING MEMORY ON A MEMORY DEVICE                |
| 83629337     | Published   |               | 1/23/2014   |            | PCT/US2014/012742  | PCT | MEMORY ACCESS FOR BUSY MEMORY                                       |
| 83629345     | Application |               | 1/16/2014   |            | PCT/US2014/011873  | PCT | Atomically Committing Write Requests                                |
| 83629379     | Published   |               | 10/28/2013  |            | PCT/US2013/067096  | PCT | LATCH-FREE CONCURRENT SEARCHING                                     |
| 83631529     | Published   |               | 10/30/2013  |            | PCT/US2013/067540  | PCT | OPTIMIZATION OF INVENTORY THROUGH PRIORITIZATION AND CATEGORIZATION |
| 83631895     | Published   |               | 10/31/2013  |            | PCT/US2013/067766  | PCT | DOMAIN NAME AND INTERNET PROTOCOL ADDRESS APPROVED AND              |
| 83634804     | Application |               | 1/17/2014   |            | PCT/US2014/012028  | PCT | DISAPPROVED MEMBERSHIP INFERENCE                                    |
| 83634810     | Published   |               | 10/30/2013  |            | PCT/US2013/067493  | PCT | MEMORY INTEGRITY CHECKING                                           |
| 83640297     | Published   |               | 10/30/2013  |            | PCT/US2013/067547  | PCT | FILE LOCATOR                                                        |
| 83640365     | Published   |               | 10/31/2013  |            | PCT/CN2013/086274  | PCT | ASYNCHRONOUS GARBAGE COLLECTION IN A DISTRIBUTED DATABASE SYSTEM    |
| 83640405     | Published   |               | 10/30/2013  |            | PCT/US2013/067488  | PCT | DETERMINING AGGREGATION INFORMATION                                 |
| 83663145     | Application |               | 10/30/2013  |            | PCT/US2013/067485  | PCT | USER INTERFACE TESTER                                               |
| 83663231     | Published   |               | 10/31/2013  |            | PCT/US2013/067790  | PCT | SOFTWARE COMMIT RISK LEVEL                                          |
| 83663256     | Published   |               | 10/31/2013  |            | PCT/US2013/067682  | PCT | PROCESS MODEL CATALOG                                               |
| 83668066     | Published   |               | 10/29/2013  |            | PCT/US2013/067302  | PCT | DETERMINING MODEL QUALITY                                           |
| 83668102     | Published   |               | 10/31/2013  |            | PCT/US2013/067738  | PCT | DAYS OF INVENTORY DETERMINATION BASED ON CONSTRAINTS                |
| 83668125     | Published   |               | 10/17/2013  |            | PCT/US2013/065434  | PCT | METERING REAL TIME SERVICE DATA                                     |
|              |             |               |             |            |                    |     | OPTIMIZING A COMPUTING TASK FOR DEPLOYMENT ON A WORKLOAD            |
|              |             |               |             |            |                    |     | TUNED SERVER                                                        |
|              |             |               |             |            |                    |     | STORING DATA AT A REMOTE LOCATION BASED ON PREDETERMINED CRITERIA   |

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| 83668143     | Published   |               | 9/27/2013   |            | PCT/US2013/062171  | PCT | REUSABLE ZONE                                                                                                                 |
| 83668157     | Published   |               | 10/3/2013   |            | PCT/US2013/063251  | PCT | MANAGING A NUMBER OF SECONDARY CLOUDS BY A MASTER CLOUD SERVICE MANAGER                                                       |
| 83668206     | Published   |               | 10/16/2013  |            | PCT/US2013/065234  | PCT | REGULATING ENTERPRISE DATABASE WAREHOUSE RESOURCE USAGE                                                                       |
| 83669717     | Application |               | 12/20/2013  |            | PCT/IN2013/000784  | PCT | STORAGE CAPACITY REGRESSION                                                                                                   |
| 83696884     | Published   |               | 9/30/2013   |            | PCT/US2013/062715  | PCT | SELECTIVELY-ENABLED BACK-UP POWER                                                                                             |
| 83703597     | Published   |               | 10/28/2013  |            | PCT/US2013/067104  | PCT | OPTIMIZING A CONSULTING ENGAGEMENT                                                                                            |
| 83705286     | Application |               | 12/9/2013   |            | PCT/US2013/073933  | PCT | NoSQL Database Data Consistency                                                                                               |
| 83705295     | Application |               | 12/6/2013   |            | PCT/US2013/073694  | PCT | NOSQL DATABASE DATA VALIDATION                                                                                                |
| 83706062     | Published   |               | 10/30/2013  |            | PCT/US2013/067531  | PCT | MANAGEMENT OF THE LIFECYCLE OF A CLOUD SERVICE MODELED AS A TOPOLOGY                                                          |
| 83719020     | Published   |               | 12/2/2013   |            | PCT/US2013/072650  | PCT | MERGING DATA FROM A SOURCE TABLE INTO A TARGET TABLE                                                                          |
| 83733715     | Application |               | 12/6/2013   |            | PCT/IN2013/000754  | PCT | File Lookup in a File System                                                                                                  |
| 83733721     | Application |               | 1/29/2014   |            | PCT/US2014/013659  | PCT | Initiator Injection for Diagnostic Information                                                                                |
| 83733742     | Application |               | 5/30/2014   |            | PCT/US2014/040331  | PCT | NETWORK OPERATION RULE                                                                                                        |
| 83733756     | Published   |               | 3/14/2014   |            | PCT/US2014/028909  | PCT | A SWITCHING FABRIC INCLUDING A VIRTUAL SWITCH COMPONENT MULTICAST PROTOCOL                                                    |
| 83733787     | Published   |               | 3/13/2014   |            | PCT/US2014/026327  | PCT | IDENTIFYING ELECTRONIC COMPONENTS FOR AUGMENTED REALITY                                                                       |
| 83734549     | Application |               | 3/20/2014   |            | PCT/US2014/031292  | PCT | DRAM ROW SPARING                                                                                                              |
| 83734580     | Published   |               | 3/3/2014    |            | PCT/US2014/019801  | PCT | REDUCING READ LATENCY OF MEMORY MODULES                                                                                       |
| 83734586     | Published   |               | 1/31/2014   |            | PCT/US2014/014024  | PCT | TASK MANAGEMENT BASED ON SEMANTIC ANALYSIS                                                                                    |
| 83734758     | Published   |               | 1/28/2014   |            | PCT/US2014/013447  | PCT | Discarding Data Points in a Time Series                                                                                       |
| 83734881     | Published   |               | 12/20/2013  |            | PCT/US2013/076784  | PCT | STORING DATA BASED ON A WRITE ALLOCATION POLICY                                                                               |
| 83735152     | Published   |               | 1/31/2014   |            | PCT/US2014/014255  | PCT | METHOD AND SYSTEM FOR SURFACE WEAR DETERMINATION                                                                              |
| 83735167     | Published   |               | 1/28/2014   |            | PCT/US2014/013415  | PCT | VERIFICATION REQUEST                                                                                                          |
| 83735287     | Application |               | 4/30/2014   |            | PCT/US2014/036205  | PCT | RISK ASSESSMENT                                                                                                               |
| 83735307     | Published   |               | 2/18/2014   |            | PCT/US2014/016780  | PCT | PATCHING OF VIRTUAL MACHINES DURING DATA RECOVERY                                                                             |
| 83735390     | Published   |               | 12/18/2013  |            | PCT/US2013/075904  | PCT | NETWORK TRAFFIC TUNING                                                                                                        |
| 83735840     | Application |               | 5/15/2014   |            | PCT/US2014/038207  | PCT | Communication Between Processor And Logic Device                                                                              |
| 83735854     | Application |               | 4/30/2014   |            | PCT/US2014/036098  | PCT | DATA PLANE TO FORWARD TRAFFIC BASED ON COMMUNICATIONS FROM A SOFTWARE DEFINED (SDN) CONTROLLER DURING A CONTROL PLANE FAILURE |
| 83735859     | Application |               | 8/13/2014   |            | PCT/US2014/050858  | PCT | UNIBODY SOCKETS INCLUDING LATCH EXTENSIONS                                                                                    |
| 83735888     | Application |               | 2/28/2014   |            | PCT/US2014/019339  | PCT |                                                                                                                               |

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| 83747140     | Published   |               | 12/14/2013  |            | PCT/US2013/075216  | PCT | POWERING LOADS WITH A POWER SUPPLY AND AN UNINTERRUPTIBLE POWER SUPPLY |
| 83747155     | Application |               | 5/12/2014   |            | PCT/US2014/037709  | PCT | Generating A Model Based on Input                                      |
| 83747639     | Application |               | 1/8/2014    |            | PCT/US2014/010600  | PCT | PACKET INSPECTION TO DETERMINE DESTINATION NODE                        |
| 83748045     | Published   |               | 3/3/2014    |            | PCT/US2014/019938  | PCT | CALENDAR SCHEDULING                                                    |
| 83748062     | Published   |               | 1/10/2014   |            | PCT/US2014/010951  | PCT | AUTO COMPLETION OF SOURCE CODE CONSTRUCTS                              |
| 83748068     | Application |               | 4/11/2014   |            | PCT/US2014/033756  | PCT | LIQUID COOLANT SUPPLY                                                  |
| 83748074     | Application |               | 3/28/2014   |            | PCT/US2014/032234  | PCT | DATA RESTORATION                                                       |
| 83748079     | Application |               | 2/28/2014   |            | PCT/US2014/019262  | PCT | ALLOCATING COSTS OF SHARED RESOURCES                                   |
| 83748100     | Application |               | 1/30/2014   |            | PCT/IN2014/000077  | PCT | ANALYZING NETWORK TRAFFIC IN A COMPUTER NETWORK                        |
| 83748105     | Application |               | 4/11/2014   |            | PCT/US2014/033846  | PCT | ENVIRONMENT PREFERENCE                                                 |
| 83748117     | Application |               | 4/24/2014   |            | PCT/US2014/035280  | PCT | DISC DRIVE MODULE                                                      |
| 83748122     | Application |               | 1/17/2014   |            | PCT/US2014/011962  | PCT | AUTOMATIC ADJUSTMENT OF DOCUMENTS                                      |
| 83748649     | Published   |               | 1/31/2014   |            | PCT/US2014/014237  | PCT | BUSINESS PROCESS MANAGEMENT                                            |
| 83748686     | Application |               | 4/8/2014    |            | PCT/US2014/033366  | PCT | REDACTABLE DOCUMENT SIGNATURES                                         |
| 83748726     | Application |               | 4/1/2014    |            | PCT/US2014/032466  | PCT | DEVICE-TYPE BASED CONTENT MANAGEMENT                                   |
| 83749084     | Application |               | 1/24/2014   |            | PCT/US2014/013001  | PCT | IDENTIFYING DEVIATIONS IN DATA                                         |
| 83749099     | Published   |               | 2/6/2014    |            | PCT/US2014/015016  | PCT | LAWFUL INTERCEPT REPORTING                                             |
| 83749113     | Published   |               | 1/30/2014   |            | PCT/US2014/013771  | PCT | SIGNAL INTERFACE COMPONENT FOR A PRINTED CIRCUIT BOARD                 |
| 83749118     | Published   |               | 1/30/2014   |            | PCT/US2014/013785  | PCT | THERMAL RELIEF PAD                                                     |
| 83756229     | Published   |               | 1/30/2014   |            | PCT/US2014/013738  | PCT | MIGRATING DATA BETWEEN MEMORIES                                        |
| 83756235     | Published   |               | 1/30/2014   |            | PCT/US2014/013735  | PCT | MEMORY DATA VERSIONING                                                 |
| 83757737     | Published   |               | 1/31/2014   |            | PCT/US2014/014051  | PCT | RESISTIVE RATIO-BASED MEMORY CELL                                      |
| 83757758     | Published   |               | 1/29/2014   |            | PCT/US2014/013506  | PCT | SHUTDOWN OF COMPUTING DEVICES                                          |
| 83757763     | Published   |               | 1/28/2014   |            | PCT/US2014/013419  | PCT | MANAGING A MULTI-LANE SERIAL LINK                                      |
| 83757897     | Published   |               | 1/31/2014   |            | PCT/US2014/014165  | PCT | RENDERING DATA INVALID IN A MEMORY ARRAY                               |
| 83762933     | Published   |               | 1/30/2014   |            | PCT/US2014/013764  | PCT | DATA STORING IN MEMORY ARRAYS                                          |
| 83763697     | Published   |               | 1/31/2014   |            | PCT/US2014/014233  | PCT | PERSISTENT MEMORY CONTROLLER BASED ATOMICITY ASSURANCE                 |
| 83763732     | Published   |               | 1/24/2014   |            | PCT/US2014/013062  | PCT | BIT-FLIP CODING                                                        |
| 83763772     | Published   |               | 1/25/2014   |            | PCT/US2014/013078  | PCT | BIDIRECTIONAL OPTICAL MULTIPLEXING EMPLOYING A HIGH CONTRAST GRATINGS  |
| 83763792     | Published   |               | 1/31/2014   |            | PCT/US2014/013978  | PCT | PRINTED CIRCUIT BOARD ASSEMBLY                                         |
| 83763797     | Published   |               | 1/31/2014   |            | PCT/US2014/014272  | PCT | ENCODED CROSS-POINT ARRAY                                              |
| 83763837     | Published   |               | 2/28/2014   |            | PCT/US2014/019352  | PCT | SENSING CIRCUIT FOR RESISTIVE MEMORY ARRAY                             |
| 83763848     | Published   |               | 1/31/2014   |            | PCT/US2014/014050  | PCT | ACTIVE-CONTROL OPTICAL RESONATOR                                       |
| 83763918     | Application |               | 5/15/2014   |            | PCT/US2014/038059  | PCT | ACCESSING DATA CONTENT USING CLOSURES                                  |

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| 83763949     | Application |               | 1/31/2014   |            | PCT/US2014/014174  | PCT | IDENTIFYING A COMPONENT WITHIN AN APPLICATION EXECUTED IN A NETWORK   |
| 83764135     | Published   |               | 1/24/2014   |            | PCT/US2014/012915  | PCT | PROPOSAL GENERATION FOR A NETWORK                                     |
| 83764170     | Application |               | 1/15/2014   |            | PCT/US2014/011652  | PCT | SECURITY AND ACCESS CONTROL                                           |
| 83764261     | Application |               | 1/31/2014   |            | PCT/US2014/014035  | PCT | HOUSING FOR EXPANSION CARDS                                           |
| 83764266     | Application |               | 4/24/2014   |            | PCT/US2014/035364  | PCT | STRUCTURING PAGE IMAGES IN A MEMORY                                   |
| 83764293     | Published   |               | 1/31/2014   |            | PCT/US2014/014259  | PCT | CACHE COHERENCE IN MULTI-COMPUTE-ENGINE SYSTEMS                       |
| 83764321     | Published   |               | 2/21/2014   |            | PCT/US2014/017715  | PCT | Performing Write Operations On Main Memory                            |
| 83765140     | Published   |               | 2/14/2014   |            | PCT/US2014/016501  | PCT | ELECTRONIC DEVICE AND CIRCUIT BOARDS THEREOF                          |
| 83765157     | Application |               | 3/7/2014    |            | PCT/US2014/021526  | PCT | NETWORK SECURITY FOR ENCRYPTED CHANNEL BASED ON REPUTATION            |
| 83765162     | Application |               | 2/21/2014   |            | PCT/US2014/017613  | PCT | SCORING FOR THREAT OBSERVABLES                                        |
| 83765168     | Application |               | 4/18/2014   |            | PCT/US2014/034590  | PCT | RATING THREAT SUBMITTER                                               |
| 83765174     | Published   |               | 12/19/2013  |            | PCT/US2013/076650  | PCT | ANALYZE CODE THAT USES WEB FRAMEWORK USING LOCAL PARAMETER MODEL      |
| 83765180     | Application |               | 1/31/2014   |            | PCT/US2014/014034  | PCT | APPLICATION TEST USING ATTACK SUGGESTIONS                             |
| 83765211     | Published   |               | 1/31/2014   |            | PCT/US2014/014258  | PCT | COMPUTING DEVICES OPERABLE ON RECOVERED WASTE HEAT                    |
| 83765225     | Application |               | 3/20/2014   |            | PCT/US2014/031332  | PCT | DYNAMIC MEMORY EXPANSION BY DATA COMPRESSION                          |
| 83766571     | Published   |               | 2/28/2014   |            | PCT/US2014/019586  | PCT | MAPPING MODE SHIFT                                                    |
| 83766579     | Published   |               | 2/28/2014   |            | PCT/US2014/019598  | PCT | DELAY DESTAGE OF DATA BASED ON SYNC COMMAND                           |
| 83767387     | Application |               | 1/17/2014   |            | PCT/US2014/012103  | PCT | BLOOM FILTER BASED LOG DATA ANALYSIS                                  |
| 83770166     | Published   |               | 1/28/2014   |            | PCT/US2014/013454  | PCT | DATA MIGRATION                                                        |
| 83774311     | Application |               | 3/14/2014   |            | PCT/US2014/028697  | PCT | RESOURCE RESTRICTION                                                  |
| 83776275     | Published   |               | 1/31/2014   |            | PCT/US2014/014012  | PCT | SIGNAL RETURN PATH                                                    |
| 83776281     | Published   |               | 1/31/2014   |            | PCT/US2014/014232  | PCT | USER INTERFACE LEVEL TUTORIALS                                        |
| 83776286     | Application |               | 2/6/2014    |            | PCT/US2014/015040  | PCT | RESOURCE MANAGEMENT                                                   |
| 83776301     | Application |               | 4/28/2014   |            | PCT/US2014/035736  | PCT | CACHE MANAGEMENT                                                      |
| 83776601     | Published   |               | 1/31/2014   |            | PCT/US2014/014295  | PCT | PROBE TIP ASSEMBLY                                                    |
| 83776635     | Application |               | 1/29/2014   |            | PCT/US2014/013500  | PCT | PREDICTIVE ANALYTICS UTILIZING REAL TIME EVENTS                       |
| 83776641     | Published   |               | 2/24/2014   |            | PCT/US2014/018094  | PCT | VIRTUAL NETWORK FUNCTION MANAGEMENT WITH DEACTIVATED VIRTUAL MACHINES |
| 83776650     | Published   |               | 2/25/2014   |            | PCT/US2014/018345  | PCT | MULTIPLE POOLS IN A MULTI-CORE SYSTEM                                 |

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| 83776656     | Published   |               | 1/31/2014   |            | PCT/US2014/014202  | PCT | FUNCTIONAL UNIT PROMOTION TO MANAGEMENT UNIT                                       |
| 83776661     | Published   |               | 1/31/2014   |            | PCT/US2014/014329  | PCT | MANAGING DATABASE WITH COUNTING BLOOM FILTER                                       |
| 83776707     | Published   |               | 1/24/2014   |            | PCT/IN2014/000050  | PCT | DYNAMICALLY PATCHING KERNELS USING STORAGE DATA STRUCTURES                         |
| 83777233     | Published   |               | 1/29/2014   |            | PCT/IN2014/000070  | PCT | SYNCHRONIZING PER-CPU DATA ACCESS USING PER SOCKET RW-SPINLOCKS                    |
| 83777285     | Published   |               | 1/31/2014   |            | PCT/US2014/014242  | PCT | COMFORT-BASED GARMENT MANAGEMENT                                                   |
| 83777319     | Published   |               | 1/28/2014   |            | PCT/US2014/013310  | PCT | GROUP ALERT IN SERVER SYSTEMS                                                      |
| 83777371     | Published   |               | 1/29/2014   |            | PCT/US2014/013528  | PCT | MULTI-COLUMN STATISTIC GENERATION OF A MULTI-DIMENSIONAL TREE                      |
| 83777391     | Application |               | 1/29/2014   |            | PCT/US2014/013596  | PCT | PHOTODETECTOR SYSTEM                                                               |
| 83777420     | Published   |               | 1/30/2014   |            | PCT/US2014/013885  | PCT | MEMRISTOR MEMORY WITH VOLATILE AND NON-VOLATILE STATES                             |
| 83777426     | Published   |               | 1/30/2014   |            | PCT/US2014/013938  | PCT | CHARGE TRAPPING MEMRISTOR                                                          |
| 83777463     | Application |               | 1/30/2014   |            | PCT/IN2014/000074  | PCT | DATA STORAGE SYSTEM REBUILD                                                        |
| 83777483     | Published   |               | 2/6/2014    |            | PCT/US2014/015084  | PCT | TRACE PACKET AND PATH ANALYSIS IN A SOFTWARE DEFINED NETWORK                       |
| 83777620     | Published   |               | 2/14/2014   |            | PCT/US2014/016634  | PCT | FREE FLOW ASSURANCE OF ATOMICITY OF MULTIPLE UPDATES IN PERSISTENT MEMORY          |
| 83777632     | Published   |               | 3/5/2014    |            | PCT/US2014/020940  | PCT | Processing Primary Key Modifications                                               |
| 83819031     | Application |               | 7/28/2014   |            | PCT/US2014/048432  | PCT | LOCATION-LOCKED DATA                                                               |
| 83819054     | Application |               | 10/7/2014   |            | PCT/US2014/059429  | PCT | MAINTAINING FILES IN A RETAINED FILE SYSTEM                                        |
| 83819059     | Application |               | 7/17/2014   |            | PCT/US2014/047044  | PCT | Eliminating File Duplication In A File System                                      |
| 83819074     | Application |               | 3/28/2014   |            | PCT/US2014/032278  | PCT | LOAD SELECTION FOR RECEIVING POWER FROM A BATTERY MODULE                           |
| 83819089     | Application |               | 5/28/2014   |            | PCT/US2014/039837  | PCT | MULTIPLE TANK COOLING SYSTEM                                                       |
| 83820065     | Application |               | 4/29/2014   |            | PCT/US2014/035943  | PCT | UPDATING A POINTER BASED ON A VALIDATION OF A PACKET                               |
| 83820070     | Application |               | 4/23/2014   |            | PCT/US2014/035109  | PCT | BACKPLANE INTERFACE SETS                                                           |
| 83820085     | Application |               | 4/4/2014    |            | PCT/US2014/032950  | PCT | FLEXIBLE INPUT/OUTPUT ZONE IN A SERVER CHASSIS                                     |
| 83820090     | Application |               | 4/30/2014   |            | PCT/US2014/036045  | PCT | DUPLICATE DATA USING CYCLIC REDUNDANCY CHECK                                       |
| 83820105     | Application |               | 5/27/2014   |            | PCT/US2014/039578  | PCT | STORING COMPRESSED DATA                                                            |
| 83820110     | Application |               | 4/30/2014   |            | PCT/US2014/036079  | PCT | DETERMINING LENGTHS OF ACKNOWLEDGMENT DELAYS FOR I/O COMMANDS                      |
| 83820225     | Application |               | 4/10/2014   |            | PCT/US2014/033600  | PCT | GENERALIZED SNAPSHOTS BASED ON MULTIPLE PARTIAL SNAPSHOTS                          |
| 83820231     | Application |               | 4/28/2014   |            | PCT/US2014/035666  | PCT | VIRTUAL POINT OF SALE                                                              |
| 83820236     | Application |               | 5/15/2014   |            | PCT/US2014/038055  | PCT | MEASURING USER INTERFACE RESPONSIVENESS                                            |
| 83820251     | Application |               | 6/9/2014    |            | PCT/US2014/041454  | PCT | MEASURING COMPATIBILITY OF VIEWERS BY LEVERAGING USER-PROVIDED ELEMENT DEFINITIONS |

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| 83820273     | Application |               | 5/30/2014   |            | PCT/US2014/040392  | PCT | EVALUATING USER EXPERIENCE                                                                     |
| 83820339     | Application |               | 4/30/2014   |            | PCT/US2014/036076  | PCT | EXTENDING FEATURES OF ONE DEVICE TO ANOTHER                                                    |
| 83820353     | Application |               | 5/29/2014   |            | PCT/US2014/040034  | PCT | DETERMINING GRAPHIC USER INTERFACE NAME RECOMMENDATIONS                                        |
| 83820385     | Application |               | 4/17/2014   |            | PCT/US2014/034460  | PCT | CASCADING STYLE SHEET META LANGUAGE PERFORMANCE                                                |
| 83820390     | Application |               | 6/2/2014    |            | PCT/US2014/040479  | PCT | DELIVERING MESSAGES ACCORDING TO A DESIRED DELIVERY ORDER IN A SOFTWARE DEFINED NETWORK        |
| 83820420     | Application |               | 4/29/2014   |            | PCT/US2014/035968  | PCT | EFFICIENT ROUTING IN SOFTWARE DEFINED NETWORKS                                                 |
| 83820491     | Application |               | 8/13/2014   |            | PCT/US2014/050921  | PCT | SECURE NON-VOLATILE RANDOM ACCESS MEMORY                                                       |
| 83820496     | Application |               | 8/8/2014    |            | PCT/US2014/050295  | PCT | INVENTORY INFORMATION ON MANAGEMENT CONTROLLER                                                 |
|              |             |               |             |            |                    |     |                                                                                                |
| 83820511     | Application |               | 4/30/2014   |            | PCT/US2014/036064  | PCT | FLOOD DISABLE ON NETWORK SWITCH                                                                |
| 83820516     | Application |               | 6/17/2014   |            | PCT/US2014/042711  | PCT | DNS BASED INFECTION SCORES                                                                     |
| 83820536     | Application |               | 8/15/2014   |            | PCT/CN2014/084538  | PCT | A memory efficient packet classification method                                                |
| 83820563     | Application |               | 4/24/2014   |            | PCT/US2014/035373  | PCT | POWER CONSERVATION IN POWER SOURCING EQUIPMENT                                                 |
|              |             |               |             |            |                    |     |                                                                                                |
| 83820620     | Application |               | 4/25/2014   |            | PCT/IN2014/000271  | PCT | Managing Link Failures in Software Defined Networks                                            |
| 83820954     | Application |               | 6/30/2014   |            | PCT/US2014/044905  | PCT | DYNAMICALLY APPLYING A PATCH TO A COMPUTER APPLICATION                                         |
| 83820974     | Application |               | 3/25/2014   |            | PCT/US2014/031640  | PCT | TRANSMITTING NETWORK TRAFFIC IN ACCORDANCE WITH NETWORK TRAFFIC RULES                          |
| 83821029     | Application |               | 4/28/2014   |            | PCT/US2014/035690  | PCT | DATA DISTRIBUTION BASED ON NETWORK INFORMATION                                                 |
| 83821066     | Application |               | 6/30/2014   |            | PCT/US2014/044890  | PCT | ACCESS CACHE LINE FROM LOWER LEVEL CACHE                                                       |
| 83821101     | Application |               | 5/29/2014   |            | PCT/US2014/039902  | PCT | VOLTAGE SELECTORS COUPLED TO PROCESSOR CORES                                                   |
| 83821962     | Application |               | 4/28/2014   |            | PCT/US2014/035695  | PCT | Latching Mechanism for a Carrier Tray                                                          |
| 83822125     | Application |               | 3/28/2014   |            | PCT/US2014/032133  | PCT | REAL-TIME MONITORING AND ANALYSIS OF QUERY EXECUTION                                           |
| 83822257     | Application |               | 5/6/2014    |            | PCT/US2014/036945  | PCT | BACKEND ANALYSIS AND TRANSFORMATION                                                            |
| 83822474     | Application |               | 8/18/2014   |            | PCT/US2014/051543  | PCT | SELECTING A SUBSET OF ACCESS POINTS                                                            |
| 83822492     | Application |               | 4/29/2014   |            | PCT/US2014/035898  | PCT | Fast Network Convergence and Intelligent Policy Application Using Programmable Network Devices |
| 83822569     | Application |               | 3/28/2014   |            | PCT/US2014/032156  | PCT | TESTING ELECTRONIC DEVICES                                                                     |
| 83822600     | Application |               | 3/28/2014   |            | PCT/US2014/032121  | PCT | CONTROLLED NODE CONFIGURATION                                                                  |
| 83822615     | Application |               | 3/28/2014   |            | PCT/US2014/032154  | PCT | RECONCILING INFORMATION IN A CONTROLLER AND A NODE                                             |
| 83822620     | Application |               | 4/30/2014   |            | PCT/CN2014/076593  | PCT | TRANSLATION FOR WEB SERVICES                                                                   |
| 83822635     | Application |               | 4/29/2014   |            | PCT/US2014/035923  | PCT | CLASSIFYING APPLICATION PROTOCOL INTERFACES (APIS) AS AFFECTING USER EXPERIENCE                |

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| 83822641     | Application |               | 4/25/2014   |            | PCT/US2014/035525  | PCT | APPLYING A MULTI-INSTANCE SPANNING TREE PROTOCOL (MSTP)                                                        |
|              |             |               |             |            |                    |     | CONFIGURATION                                                                                                  |
| 83822661     | Published   |               | 4/29/2014   |            | PCT/US2014/035901  | PCT | SOFTWARE-DEFINED NETWORK APPLICATION DEPLOYMENT                                                                |
| 83822684     | Application |               | 7/31/2014   |            | PCT/US2014/049006  | PCT | CROSSBAR ARRAYS WITH SHARED DRIVERS                                                                            |
| 83822689     | Application |               | 5/5/2014    |            | PCT/US2014/036736  | PCT | SELECTORS WITH OXIDE-BASED LAYERS                                                                              |
| 83824670     | Application |               | 4/29/2014   |            | PCT/US2014/035896  | PCT | SOFTWARE DEFINED NETWORK ECOSYSTEM                                                                             |
| 83824685     | Application |               | 4/30/2014   |            | PCT/US2014/036150  | PCT | MIRRORS INCLUDING REFLECTIVE AND SECOND LAYERS<br>DISPOSED ON PHOTODETECTORS                                   |
| 83825623     | Application |               | 4/30/2014   |            | PCT/US2014/036056  | PCT | VISUALIZING TOPICS WITH BUBBLES INCLUDING PIXELS                                                               |
| 83825686     | Application |               | 4/24/2014   |            | PCT/US2014/035266  | PCT | PROTOCOL DETERMINATION                                                                                         |
| 83825764     | Application |               | 4/9/2014    |            | PCT/US2014/033426  | PCT | IDENTIFYING SUSPICIOUS ACTIVITY IN A LOAD TEST                                                                 |
| 83825989     | Application |               | 4/1/2014    |            | PCT/US2014/032480  | PCT | PROVIDING BACKUP POWER                                                                                         |
| 83826024     | Application |               | 6/20/2014   |            | PCT/US2014/043486  | PCT | SUPPORT MEMBER                                                                                                 |
| 83826072     | Application |               | 7/10/2014   |            | PCT/US2014/046175  | PCT | Using A Single Deployer Agent To Deploy A Plurality Of<br>Programs On A Server                                 |
| 83826107     | Application |               | 6/25/2014   |            | PCT/US2014/044065  | PCT | DOCUMENTATION NOTIFICATION                                                                                     |
| 83826119     | Application |               | 4/30/2014   |            | PCT/US2014/036158  | PCT | THERMAL MANAGEMENT ASSEMBLY                                                                                    |
| 83828054     | Application |               | 4/30/2014   |            | PCT/CN2014/076604  | PCT | PERFORMING A MIRROR TEST FOR LOCALIZATION TESTING                                                              |
| 83828074     | Application |               | 4/30/2014   |            | PCT/US2014/036122  | PCT | MAINTAINING AN ORIENTATION OF A GRAPH                                                                          |
| 83829920     | Application |               | 4/29/2014   |            | PCT/US2014/035915  | PCT | MEASURING USER ACTION PERFORMANCE BY CLASSIFYING<br>USER ACTIONS                                               |
| 83829928     | Application |               | 4/29/2014   |            | PCT/US2014/035938  | PCT | RELATING USER ACTION FLOWS BY STORING RELATIONSHIPS<br>BETWEEN THREADS AND OBJECTS                             |
| 83829946     | Application |               | 4/29/2014   |            | PCT/US2014/035829  | PCT | COMPUTING SYSTEM MANAGEMENT USING SHARED<br>MEMORY                                                             |
| 83830478     | Application |               | 4/30/2014   |            | PCT/US2014/036055  | PCT | SELECTING FROM COMPUTING NODES FOR CORRELATING<br>EVENTS                                                       |
| 83830509     | Application |               | 4/29/2014   |            | PCT/US2014/035911  | PCT | RESISTIVE MEMORY DEVICES WITH AN OXYGEN-SUPPLYING<br>LAYER                                                     |
| 83830541     | Application |               | 4/30/2014   |            | PCT/US2014/036195  | PCT | RESISTIVE MEMORY DEVICES WITH A MULTI-COMPONENT<br>ELECTRODE                                                   |
| 83832284     | Application |               | 6/16/2014   |            | PCT/US2014/042563  | PCT | VIRTUAL NODE DEPLOYMENTS OF CLUSTER-BASED<br>APPLICATIONS                                                      |
| 83832536     | Application |               | 4/30/2014   |            | PCT/US2014/036222  | PCT | REGULATING MEMRISTOR SWITCHING PULSES                                                                          |
| 83832777     | Application |               | 4/25/2014   |            | PCT/US2014/035483  | PCT | A statistics-based genetic algorithm for learning classifiers of<br>OS trace data.applied to malware detection |



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| 83833297     | Application |               | 6/19/2014   |            | PCT/US2014/043074  | PCT | INSTALL RUNTIME AGENT FOR SECURITY TEST                                                |
| 83833343     | Application |               | 7/18/2014   |            | PCT/US2014/047161  | PCT | DETERMINING TERMS FOR SECURITY TEST                                                    |
| 83833988     | Application |               | 5/20/2014   |            | PCT/US2014/038854  | PCT | POINT-WISE PROTECTION OF APPLICATION USING RUNTIME AGENT AND DYNAMIC SECURITY ANALYSIS |
| 83834010     | Application |               | 5/23/2014   |            | PCT/US2014/039312  | PCT | READ AHEAD BUFFER PROCESSING                                                           |
| 83857314     | Published   |               | 3/20/2014   |            | PCT/US2014/031327  | PCT | Solid State Drive Operations                                                           |
| 83862065     | Application |               | 3/27/2014   |            | PCT/US2014/032012  | PCT | INFORMATION TECHNOLOGY (IT) TICKET ASSIGNMENT                                          |
| 83874142     | Application |               | 3/31/2014   |            | PCT/US2014/032365  | PCT | PRIORITIZATION OF NETWORK TRAFFIC IN A DISTRIBUTED PROCESSING SYSTEM                   |
| 83874563     | Application |               | 5/30/2014   |            | PCT/US2014/040321  | PCT | PARTIALLY SORTED LOG ARCHIVE                                                           |
| 83931692     | Application |               | 5/2/2014    |            | PCT/US2014/036527  | PCT | WEB APPLICATION LAUNCH APPLICATION PROGRAMMING INTERFACE                               |
| 83943021     | Application |               | 4/30/2014   |            | PCT/US2014/036193  | PCT | MIGRATING OBJECTS FROM A SOURCE SERVICE TO A TARGET SERVICE                            |
| 83944741     | Application |               | 6/30/2014   |            | PCT/US2014/044932  | PCT | Automatic Generation of Sub-Queries                                                    |
| 83951087     | Application |               | 5/23/2014   |            | PCT/US2014/039279  | PCT | AGGREGATING DATA FOR VISUALIZATION                                                     |
| 83951127     | Application |               | 5/23/2014   |            | PCT/US2014/039406  | PCT | ADVANCED PERSISTENT THREAT IDENTIFICATION                                              |
| 83952467     | Application |               | 9/25/2014   |            | PCT/US2014/057419  | PCT | DETERMINE SECURE ACTIVITY OF APPLICATION UNDER TEST                                    |
| 83952485     | Application |               | 10/28/2014  |            | PCT/US2014/062622  | PCT | DETERMINE UNREFERENCED PAGE IN DEPLICATION STORE FOR GARBAGE COLLECTION                |
| 83952490     | Application |               | 6/10/2014   |            | PCT/US2014/041741  | PCT | REPLICATING DATA USING REMOTE DIRECT MEMORY ACCESS (RDMA)                              |
| 83952496     | Application |               | 6/26/2014   |            | PCT/US2014/044354  | PCT | POST PACKAGE REPAIR (PPR) DATA IN NON-VOLATILE MEMORY                                  |
| 83952891     | Application |               | 7/31/2014   |            | PCT/US2014/049130  | PCT | INTERPOSER REGISTRATION ELEMENTS                                                       |
| 83952896     | Application |               | 9/22/2014   |            | PCT/US2014/056790  | PCT | SINGLE MODE VERTICAL-CAVITY SURFACE-EMITTING LASER                                     |
| 83952931     | Application |               | 6/30/2014   |            | PCT/US2014/044940  | PCT | AUTOMATIC ASSOCIATION OF CONTENT FROM SOURCES                                          |
| 83952936     | Application |               | 7/29/2014   |            | PCT/US2014/048580  | PCT | REFERENCE CURRENTS FOR INPUT CURRENT COMPARISONS                                       |
| 83952956     | Application |               | 7/29/2014   |            | PCT/US2014/048529  | PCT | MULTIPHASE SELECTORS                                                                   |
| 83952994     | Application |               | 6/27/2014   |            | PCT/US2014/044632  | PCT | FINDING FAULTS IN GEOLOGICAL DATA                                                      |
| 83952999     | Application |               | 6/30/2014   |            | PCT/US2014/044887  | PCT | PIECEWISE SMOOTH REGULARIZATION OF DATA                                                |
| 83953059     | Application |               | 5/15/2014   |            | PCT/US2014/038204  | PCT | NETWORK SCHEDULING                                                                     |
| 83953163     | Application |               | 5/30/2014   |            | PCT/US2014/040296  | PCT | RESOURCE USAGE DATA COLLECTION WITHIN A DISTRIBUTED PROCESSING FRAMEWORK               |
| 83953168     | Application |               | 7/30/2014   |            | PCT/US2014/048818  | PCT | OPTICAL WAVEGUIDE RESONATORS                                                           |

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| 83953246     | Application |               | 8/28/2014   |            | PCT/US2014/053232  | PCT | SLOPPY FEEDBACK LOOP COMPILATION                                                                                            |
| 83953403     | Application |               | 9/30/2014   |            | PCT/CN2014/087870  | PCT | COMMUNICATION OF EVENT-BASED CONTENT                                                                                        |
| 83953414     | Application |               | 9/26/2014   |            | PCT/US2014/057907  | PCT | STORAGE OF HYPERVISOR MESSAGES IN NETWORK PACKETS                                                                           |
|              |             |               |             |            |                    |     | GENERATED BY VIRTUAL MACHINES                                                                                               |
| 83953438     | Application |               | 7/31/2014   |            | PCT/US2014/049131  | PCT | OBJECT IDENTIFICATION AND SENSING                                                                                           |
| 83953469     | Application |               | 7/31/2014   |            | PCT/US2014/049119  | PCT | LOCALIZATION FROM ACCESS POINT AND MOBILE DEVICES                                                                           |
| 83953489     | Application |               | 9/26/2014   |            | PCT/US2014/057786  | PCT | LOGICAL SEGMENT TOPOLOGY DATA                                                                                               |
|              |             |               |             |            |                    |     |                                                                                                                             |
| 83953515     | Application |               | 7/30/2014   |            | PCT/US2014/048863  | PCT | DETECTION OF A PLUG COUPLED TO A CONNECTOR HOUSING                                                                          |
|              |             |               |             |            |                    |     |                                                                                                                             |
| 83953521     | Application |               | 8/29/2014   |            | PCT/US2014/053453  | PCT | MULTIPLEXING NETWORK CONNECTIONS                                                                                            |
| 83953529     | Application |               | 11/7/2014   |            | PCT/US2014/064645  | PCT | OPERATIONALLY INDEPENDENT RESET                                                                                             |
| 83953544     | Application |               | 8/12/2014   |            | PCT/US2014/050728  | PCT | INFORMATION EXCHANGE GATEWAY                                                                                                |
| 83953575     | Application |               | 9/12/2014   |            | PCT/US2014/055360  | PCT | ASSIGN ERROR RATE TO MEMORY                                                                                                 |
| 83953580     | Application |               | 7/23/2014   |            | PCT/US2014/047786  | PCT | RELAY TO PEER VIRTUAL MACHINE TRANSITION                                                                                    |
| 83953595     | Application |               | 9/11/2014   |            | PCT/US2014/056088  | PCT | NEURAL NETWORK VERIFICATION                                                                                                 |
| 83953601     | Application |               | 6/20/2014   |            | PCT/US2014/043390  | PCT | MANUAL AND AUTOMATED TASK EXECUTION                                                                                         |
|              |             |               |             |            |                    |     |                                                                                                                             |
| 83953649     | Application |               | 3/11/2015   |            | PCT/US2015/019968  | PCT | DYNAMICALLY ADJUSTING A MODEL FOR A SECURITY OPERATIONS CENTER                                                              |
|              |             |               |             |            |                    |     |                                                                                                                             |
| 83954262     | Application |               | 8/8/2014    |            | PCT/US2014/050258  | PCT | REPLICATING A WEB TECHNOLOGY                                                                                                |
| 83954302     | Application |               | 11/26/2014  |            | PCT/US2014/067519  | PCT | DETERMINING TEST APPLICATION EFFECTIVENESS                                                                                  |
| 83954307     | Application |               | 8/18/2014   |            | PCT/US2014/051408  | PCT | INTERACTIVE SEQUENTIAL PATTERN MINING                                                                                       |
| 83954322     | Application |               | 6/30/2014   |            | PCT/US2014/044900  | PCT | DETERMINATION OF A NETWORK CLOUD CONTAINING AN UNCONTROLLED NETWORK DEVICE BASED ON LINK DATA OF CONTROLLED NETWORK DEVICES |
|              |             |               |             |            |                    |     |                                                                                                                             |
| 83954337     | Application |               | 7/31/2014   |            | PCT/US2014/049024  | PCT | DETERMINING APPLICATION CHANGE SUCCESS RATINGS                                                                              |
| 83954342     | Application |               | 6/27/2014   |            | PCT/US2014/044570  | PCT | SECURITY POLICY BASED ON RISK                                                                                               |
| 83954348     | Application |               | 7/29/2014   |            | PCT/US2014/048705  | PCT | CLOUD INFRASTRUCTURE EVENT ANALYSIS                                                                                         |
| 83954353     | Application |               | 9/30/2014   |            | PCT/US2014/058224  | PCT | STRING PROPERTY LABELS FOR STATIC ANALYSIS                                                                                  |
| 83954373     | Application |               | 9/24/2014   |            | PCT/US2014/057142  | PCT | INFRASTRUCTURE RULE GENERATION                                                                                              |
| 83954391     | Application |               | 8/28/2014   |            | PCT/US2014/053199  | PCT | DISTRIBUTED DETECTION OF MALICIOUS CLOUD ACTORS                                                                             |
| 83954396     | Application |               | 11/18/2014  |            | PCT/US2014/066175  | PCT | USER INTERFACE OVERLAY                                                                                                      |
| 83954402     | Application |               | 7/8/2014    |            | PCT/US2014/045670  | PCT | DISCOVERING CONNECTION OF PASSIVE CABLES                                                                                    |
| 83954408     | Application |               | 7/8/2014    |            | PCT/US2014/045679  | PCT | DISCOVERING CONNECTION OF PASSIVE CABLES                                                                                    |
| 83954414     | Application |               | 9/30/2014   |            | PCT/US2014/058301  | PCT | EVALUATING DOCUMENTATION COVERAGE                                                                                           |
| 83954419     | Application |               | 9/3/2014    |            | PCT/CN2014/085794  | PCT | SCREEN-IMAGE BASED CLASSIFICATION                                                                                           |
| 83954831     | Application |               | 9/29/2014   |            | PCT/US2014/057946  | PCT | PROVISIONED RESOURCES MANAGEMENT                                                                                            |

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| 83954851     | Application |               | 7/31/2014   |            | PCT/US2014/049267  | PCT | DYNAMIC ADJUSTMENT OF THRESHOLDS                                          |
| 83954880     | Application |               | 7/31/2014   |            | PCT/US2014/049061  | PCT | REMOTE SESSION INFORMATION BASED ON PROCESS IDENTIFIER                    |
| 83954915     | Application |               | 8/29/2014   |            | PCT/US2014/053444  | PCT | STATIC PROGRAM ANALYSIS IN AN OBJECT-RELATIONAL MAPPING                   |
| 83954926     | Application |               | 7/1/2014    |            | PCT/US2014/045117  | PCT | MEMORY CONTROLLER                                                         |
| 83954931     | Application |               | 5/28/2014   |            | PCT/US2014/039703  | PCT | DYNAMIC GRAPHIC ENTITY DETERMINATION                                      |
| 83954966     | Application |               | 8/28/2014   |            | PCT/US2014/053106  | PCT | CROSS-DOMAIN INFORMATION MANAGEMENT                                       |
| 83955856     | Application |               | 9/30/2014   |            | PCT/US2014/058279  | PCT | Docking Station for Blade Computing Device                                |
| 83955885     | Application |               | 10/15/2014  |            | PCT/US2014/060705  | PCT | PROVIDING TRANSACTIONAL SUPPORT TO A DATA STORAGE SYSTEM                  |
| 83956037     | Application |               | 8/29/2014   |            | PCT/US2014/053552  | PCT | SCALING PERSISTENT CONNECTIONS FOR CLOUD COMPUTING                        |
| 83956105     | Application |               | 7/31/2014   |            | PCT/US2014/049287  | PCT | Encapsulation Packet With Class Of Service Encoding                       |
| 83956200     | Application |               | 6/10/2014   |            | PCT/US2014/041720  | PCT | WAKE UP MESSAGE TRANSMISSION RATE                                         |
| 83957325     | Application |               | 5/21/2014   |            | PCT/US2014/039622  | PCT | VALIDATION OF A REPAIR TO A SELECTED ROW OF DATA                          |
| 83957330     | Application |               | 7/7/2014    |            | PCT/US2014/045561  | PCT | SLOTTED CONNECTOR                                                         |
| 83957605     | Application |               | 7/8/2014    |            | PCT/US2014/045641  | PCT | DUAL IN-LINE MEMORY MODULE CONNECTOR                                      |
| 83957683     | Application |               | 7/31/2014   |            | PCT/US2014/049065  | PCT | FRONT CABLE MANAGEMENT ASSEMBLY                                           |
| 83957743     | Application |               | 7/30/2014   |            | PCT/US2014/048866  | PCT | MULTI-BAY APPARATUS                                                       |
| 83957823     | Application |               | 7/30/2014   |            | PCT/US2014/048938  | PCT | System And Method For Designing A Printed Circuit Board                   |
| 83957851     | Application |               | 7/25/2014   |            | PCT/US2014/048306  | PCT | ASYMMETRICALLY SELECTING MEMORY ELEMENTS                                  |
| 83957866     | Application |               | 9/19/2014   |            | PCT/US2014/056682  | PCT | BUSINESS RESOURCE MODELING                                                |
| 83957872     | Application |               | 7/28/2014   |            | PCT/US2014/048435  | PCT | MEMRISTOR PROGRAMMING ERROR REDUCTION                                     |
| 83957892     | Application |               | 7/28/2014   |            | PCT/US2014/048458  | PCT | PLASMONIC AVALANCHE PHOTODETECTION                                        |
| 83957903     | Application |               | 6/13/2014   |            | PCT/US2014/042380  | PCT | DETERMINING THE LOCATION OF A MOBILE COMPUTING DEVICE                     |
| 83957908     | Application |               | 6/9/2014    |            | PCT/US2014/041602  | PCT | CONTEXT-BASED EXPERIENCE                                                  |
| 83957935     | Application |               | 7/30/2014   |            | PCT/US2014/048918  | PCT | APPARATUS HAVING A MEMORY CELL AND A SHUNT DEVICE                         |
| 83957940     | Application |               | 9/30/2014   |            | PCT/US2014/058205  | PCT | MODULAR COOLING                                                           |
| 83957946     | Application |               | 7/23/2014   |            | PCT/US2014/047760  | PCT | DELAYED READ INDICATION                                                   |
| 83957951     | Application |               | 7/31/2014   |            | PCT/US2014/049259  | PCT | ASSIGNING REDUNDANCY IN ENCODING DATA ONTO CROSSBAR MEMORY ARRAYS         |
| 83957966     | Application |               | 7/31/2014   |            | PCT/US2014/049271  | PCT | DETERMINING A RESISTANCE STATE OF A CELL IN A CROSSBAR MEMORY ARRAY       |
| 83957971     | Application |               | 7/30/2014   |            | PCT/US2014/048900  | PCT | Using Wireless PHY layer information to determine client's mobility mode. |
| 83957977     | Application |               | 7/31/2014   |            | PCT/US2014/049205  | PCT | ENCODING DATA WITHIN A CROSSBAR MEMORY ARRAY                              |

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| 83957998     | Application |               | 7/21/2014   |            | PCT/US2014/047445  | PCT | Systems and procedures for determining linkage among Security Indicators and Threat Observables |
| 83958003     | Application |               | 6/10/2014   |            | PCT/US2014/041751  | PCT | Network Security                                                                                |
| 83958018     | Application |               | 9/30/2014   |            | PCT/US2014/058498  | PCT | MODULAR UTILITIES                                                                               |
| 83958023     | Application |               | 11/7/2014   |            | PCT/US2014/064513  | PCT | DATA CONVERSION USING AN ADDRESS SPACE IDENTIFICATION                                           |
| 83958029     | Application |               | 7/22/2014   |            | PCT/US2014/047579  | PCT | Systems and methods to identify access to Security Indicators                                   |
| 83958081     | Application |               | 6/25/2014   |            | PCT/US2014/044104  | PCT | BOLSTER PLATE                                                                                   |
| 83958086     | Application |               | 7/31/2014   |            | PCT/US2014/049277  | PCT | MOUNTING ASSEMBLY                                                                               |
| 83958112     | Application |               | 7/8/2014    |            | PCT/US2014/045786  | PCT | MOUNTING MEMBER                                                                                 |
| 83958157     | Application |               | 7/31/2014   |            | PCT/US2014/049261  | PCT | REDUNDANT POWER SUPPLY UNITS                                                                    |
| 83958192     | Application |               | 7/29/2014   |            | PCT/US2014/048614  | PCT | Processing Nodes                                                                                |
| 83958212     | Application |               | 8/13/2014   |            | PCT/US2014/050950  | PCT | NON-VOLATILE STORAGE OF MANAGEMENT DATA                                                         |
| 83958261     | Application |               | 6/27/2014   |            | PCT/US2014/044721  | PCT | BUFFER-BASED UPDATE OF STATE DATA                                                               |
| 83958501     | Application |               | 7/31/2014   |            | PCT/US2014/049313  | PCT | CACHE MANAGEMENT FOR NONVOLATILE MAIN MEMORY                                                    |
| 83958705     | Application |               | 7/22/2014   |            | PCT/US2014/047575  | PCT | Conditional Sharing of Security Indicators                                                      |
| 83958762     | Application |               | 7/29/2014   |            | PCT/US2014/048553  | PCT | THREE-DIMENSIONAL VIEW OF NETWORK MAPPING                                                       |
| 83958767     | Application |               | 7/30/2014   |            | PCT/US2014/048860  | PCT | CONFIGURING MANAGED SERVER                                                                      |
| 83958848     | Application |               | 9/10/2014   |            | PCT/US2014/055005  | PCT | INDICATE A FUNCTIONAL STATUS OF CORRESPONDING ELECTRONIC DEVICES                                |
| 83958873     | Application |               | 8/7/2014    |            | PCT/IN2014/000516  | PCT | ACTIVE DIRECTORY TOPOLOGY CREATION                                                              |
| 83958879     | Application |               | 6/30/2014   |            | PCT/US2014/044778  | PCT | SHELF MOVABLE BETWEEN AN EXTENDED SHELF POSITION AND A SHELF STORAGE POSITION                   |
| 83958894     | Application |               | 7/18/2014   |            | PCT/US2014/047130  | PCT | SEALING AN INPUT/OUTPUT PORT OF AN INPUT/OUTPUT SWITCH                                          |
| 83958899     | Application |               | 7/29/2014   |            | PCT/US2014/048546  | PCT | LATCH ASSEMBLY INCLUDING A COVER HAVING A CAVITY AND A LEVER DISPOSED IN THE CAVITY             |
| 83958905     | Application |               | 8/4/2014    |            | PCT/IN2014/000512  | PCT | EVENT STREAM PROCESSING                                                                         |
| 83959649     | Application |               | 6/17/2014   |            | PCT/US2014/042802  | PCT | DISTRIBUTED STORAGE DATA RECOVERY                                                               |
| 83959657     | Application |               | 7/22/2014   |            | PCT/US2014/047641  | PCT | FILES TIERING IN MULTI-VOLUME FILE SYSTEMS                                                      |
| 83960027     | Application |               | 7/31/2014   |            | PCT/US2014/049082  | PCT | EVENT CLUSTERS                                                                                  |
| 83960039     | Application |               | 7/25/2014   |            | PCT/US2014/048228  | PCT | CONSTRAINING AUTHORIZATION TOKENS VIA FILTERING                                                 |
| 83960044     | Application |               | 7/31/2014   |            | PCT/US2014/049191  | PCT | CREATING A SECURITY REPORT FOR A CUSTOMER NETWORK                                               |
| 83960482     | Application |               | 9/26/2014   |            | PCT/US2014/057565  | PCT | GENERATION OF PERFORMANCE OFFERINGS FOR INTERACTIVE APPLICATIONS                                |

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| 83960502     | Application |               | 7/30/2014   |            | PCT/US2014/048806  | PCT | AMORPHOUS METAL ALLOY ELECTRODES IN NON-VOLATILE DEVICE APPLICATIONS                                                                       |
| 83961778     | Application |               | 9/30/2014   |            | PCT/US2014/058343  | PCT | TOPOLOGY BASED MANAGEMENT OF SECOND DAY OPERATIONS                                                                                         |
| 83964656     | Application |               | 6/6/2014    |            | PCT/US2014/041311  | PCT | TOPIC RECOMMENDATION                                                                                                                       |
| 83965795     | Application |               | 6/9/2014    |            | PCT/US2014/041572  | PCT | Expression projection in Vertica is a projection with at least one column that represents an expression                                    |
| 83965801     | Application |               | 6/9/2014    |            | PCT/US2014/041580  | PCT | Aggregate Projections                                                                                                                      |
| 83965806     | Application |               | 6/9/2014    |            | PCT/US2014/041582  | PCT | A Top-K projection is a projection that stores pre-computed top k rows from each group of rows of table that includes many groups of rows. |
| 83965924     | Application |               | 7/24/2014   |            | PCT/US2014/048026  | PCT | EXPANDER TRANSMISSION DATA RATE DETERMINATION                                                                                              |
| 83966573     | Published   |               | 6/10/2014   |            | PCT/US2014/041710  | PCT | TILE-BASED GRAPHICAL EXPLORATION OF COLLECTIONS OF OBJECTS                                                                                 |
| 83980573     | Application |               | 9/30/2014   |            | PCT/US2014/058289  | PCT | CROSSPOINT ARRAY DECODER                                                                                                                   |
| 83980577     | Application |               | 9/25/2014   |            | PCT/US2014/057364  | PCT | CROSSPOINT ARRAY DECODER                                                                                                                   |
| 83982196     | Application |               | 6/27/2014   |            | PCT/US2014/044599  | PCT | LINK DISCOVERY IN SOFTWARE-DEFINED NETWORKS USING A CONTROLLER AND NETWORK DEVICES CONTROLLED BY THE CONTROLLER                            |
| 83983089     | Application |               | 6/25/2014   |            | PCT/US2014/044160  | PCT | NETWORK FUNCTION VIRTUALIZATION                                                                                                            |
| 83996498     | Application |               | 9/3/2014    |            | PCT/US2014/053825  | PCT | RELATIONSHIP BASED CACHE RESOURCE NAMING AND EVALUATION                                                                                    |
| 83996506     | Application |               | 7/31/2014   |            | PCT/US2014/049075  | PCT | SHADOW ELEMENTS                                                                                                                            |
| 83998384     | Application |               | 7/28/2014   |            | PCT/US2014/048392  | PCT | ACCESSING RESOURCES ACROSS MULTIPLE TENANTS                                                                                                |
| 83998390     | Application |               | 7/28/2014   |            | PCT/US2014/048384  | PCT | PROVIDING DATA BACKUP                                                                                                                      |
| 83998444     | Application |               | 7/21/2014   |            | PCT/US2014/047441  | PCT | RADIAL HISTOGRAM MATCHING                                                                                                                  |
| 84016354     | Application |               | 9/5/2014    |            | PCT/US2014/054292  | PCT | BACKUP POWER AND LOAD DISCOVERY                                                                                                            |
| 84018350     | Application |               | 9/24/2014   |            | PCT/US2014/057318  | PCT | BLOCK PRIORITY INFORMATION                                                                                                                 |
| 84018358     | Application |               | 9/22/2014   |            | PCT/US2014/056847  | PCT | NON-VOLATILE STORAGE DEVICE                                                                                                                |
| 84019703     | Application |               | 8/28/2014   |            | PCT/US2014/053236  | PCT | WORKFLOW CUSTOMIZATION                                                                                                                     |
| 84019864     | Application |               | 8/26/2014   |            | PCT/US2014/052714  | PCT | TESTING A CLOUD SERVICE COMPONENT ON A CLOUD PLATFORM                                                                                      |
| 84022079     | Application |               | 10/13/2014  |            | PCT/US2014/060284  | PCT | PARTIAL SNAPSHOT CREATION                                                                                                                  |
| 84026925     | Application |               | 1/23/2015   |            | PCT/US2015/012730  | PCT | SCHEDULER-ASSIGNED PROCESSOR RESOURCE GROUPS                                                                                               |
| 84027749     | Application |               | 1/16/2015   |            | PCT/US2015/011852  | PCT | SHARED INTERMEDIATE HASH VALUES                                                                                                            |
| 84027753     | Application |               | 2/19/2015   |            | PCT/US2015/016695  | PCT | POST-SAMPLING CONFLICT DETECTION                                                                                                           |
| 84028877     | Application |               | 9/24/2014   |            | PCT/US2014/057199  | PCT | OPERATING SYSTEM AGNOSTIC VALIDATION OF FIRMWARE IMAGES                                                                                    |

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| 84028881     | Application |               | 9/30/2014   |            | PCT/US2014/058333  | PCT | PROCESSING QUERY OF DATABASE AND DATA STREAM                                   |
| 84028949     | Application |               | 11/26/2014  |            | PCT/US2014/067651  | PCT | SPECULATIVE EXECUTION OF A STREAM OF CHANGES                                   |
| 84028954     | Application |               | 11/26/2014  |            | PCT/US2014/067599  | PCT | DATABASE TRANSFER OF CHANGES                                                   |
| 84029862     | Application |               | 8/29/2014   |            | PCT/US2014/053369  | PCT | FAN MODULE ASSEMBLY                                                            |
| 84029919     | Application |               | 1/21/2015   |            | PCT/US2015/012184  | PCT | VIRTUAL STORAGE                                                                |
| 84029962     | Application |               | 1/13/2015   |            | PCT/US2015/011108  | PCT | SERVER RESPONSE TIME MONITORING                                                |
| 84029977     | Application |               | 11/25/2014  |            | PCT/US2014/067389  | PCT | IMPLANTABLE DEVICE FOR DETECTING LIGHT CORRELATING TO VESSEL PATENCY           |
| 84029988     | Application |               | 12/23/2014  |            | PCT/US2014/072022  | PCT | DETERMINING POWER DIFFERENCE IN SENSOR SIGNALS                                 |
| 84030002     | Application |               | 11/25/2014  |            | PCT/US2014/067381  | PCT | DISTRESS SIGNAL DEVICE                                                         |
| 84030016     | Application |               | 9/26/2014   |            | PCT/US2014/057805  | PCT | BEHAVIOR TRACKING AND MODIFICATION USING MOBILE AUGMENTED REALITY              |
| 84030022     | Application |               | 9/26/2014   |            | PCT/US2014/057642  | PCT | CACHING NODES                                                                  |
| 84030028     | Application |               | 9/26/2014   |            | PCT/US2014/057645  | PCT | COMPUTING NODES                                                                |
| 84030059     | Application |               | 9/9/2014    |            | PCT/US2014/054774  | PCT | AUTO-CONFIGURATION AND MANAGEMENT OF STORAGE RESOURCES                         |
| 84030080     | Application |               | 11/17/2014  |            | PCT/US2014/065916  | PCT | LINKING AN ENTITY RELATING TO PRODUCT DEVELOPMENT TO A DOCUMENT PORTION        |
| 84030541     | Application |               | 10/29/2014  |            | PCT/US2014/062849  | PCT | TRANS-FABRIC INSTRUCTION SET FOR A COMMUNICATION FABRIC                        |
| 84030549     | Application |               | 12/19/2014  |            | PCT/US2014/071358  | PCT | MULTICAST ADVERTISEMENT MESSAGE FOR A NETWORK SWITCH IN A STORAGE AREA NETWORK |
| 84030557     | Application |               | 2/17/2015   |            | PCT/US2015/016162  | PCT | BLADE SUB-ENCLOSURE INTERMEDIATE CONNECTOR                                     |
| 84030635     | Application |               | 11/3/2014   |            | PCT/US2014/063710  | PCT | HARDWARE COMPONENT IDENTIFICATION                                              |
| 84030647     | Application |               | 9/11/2014   |            | PCT/US2014/055197  | PCT | NON-MINIMUM COST FORWARDING FOR PACKET-SWITCHED NETWORKS                       |
| 84030655     | Application |               | 12/2/2014   |            | PCT/US2014/068009  | PCT | TRACKING OF ASSETS                                                             |
| 84030706     | Application |               | 12/10/2014  |            | PCT/US2014/069625  | PCT | FIRMWARE-BASED PROVISIONING OF OPERATING SYSTEM RESOURCES                      |
| 84030767     | Application |               | 10/30/2014  |            | PCT/EP2014/073336  | PCT | VIRTUAL CONTENT DELIVERY NETWORK                                               |
| 84030833     | Application |               | 10/31/2014  |            | PCT/US2014/063320  | PCT | STORAGE ARRAY ALLOCATOR                                                        |
| 84030849     | Application |               | 12/23/2014  |            | PCT/US2014/072231  | PCT | PREVENTION OF A PREDETERMINED ACTION REGARDING DATA                            |
| 84030853     | Application |               | 11/24/2014  |            | PCT/US2014/067067  | PCT | APPLICATION MANAGEMENT BASED ON DATA CORRELATIONS                              |
| 84030861     | Application |               | 9/18/2014   |            | PCT/US2014/056347  | PCT | DATA TO BE BACKED UP IN A BACKUP SYSTEM                                        |
| 84030878     | Application |               | 12/4/2014   |            | PCT/US2014/068600  | PCT | GROUPING EVENT REPORTS                                                         |

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| 84030970     | Application |               | 10/31/2014  |            | PCT/US2014/063517  | PCT | END TO END QUALITY OF SERVICE IN STORAGE AREA NETWORKS                                                        |
| 84031015     | Application |               | 2/20/2015   |            | PCT/US2015/016817  | PCT | TOOL-LESS MULTIPPOINT LATCHING MECHANISM                                                                      |
| 84031019     | Application |               | 10/31/2014  |            | PCT/US2014/063554  | PCT | Group Zoning and Access Control Over a Network                                                                |
| 84031047     | Application |               | 10/30/2014  |            | PCT/US2014/063146  | PCT | A HANDLE FOR A DRAWER                                                                                         |
| 84031059     | Application |               | 10/2/2014   |            | PCT/US2014/058767  | PCT | Hard Drive Carrier                                                                                            |
| 84031067     | Application |               | 11/20/2014  |            | PCT/US2014/066692  | PCT | QUERY A HARDWARE COMPONENT FOR AN ANALYSIS                                                                    |
| 84031079     | Application |               | 9/22/2014   |            | PCT/US2014/056776  | PCT | TENANT DATA MAPPING FOR MULTIPLE TENANT CLOUD APPLICATIONS                                                    |
| 84031099     | Application |               | 1/9/2015    |            | PCT/US2015/010833  | PCT | OBTAINING A NETWORK ADDRESS BASED ON AN IDENTIFIER                                                            |
| 84031162     | Application |               | 10/31/2014  |            | PCT/US2014/063281  | PCT | INDICATING A PRIVILEGE LEVEL                                                                                  |
| 84031170     | Application |               | 2/13/2015   |            | PCT/US2015/015893  | PCT | THERMAL BUS BAR                                                                                               |
| 84031190     | Application |               | 10/9/2014   |            | PCT/US2014/059882  | PCT | A TRANSMITTER THAT DOES NOT RESEND A PACKET DESPITE RECEIPT OF A MESSAGE TO RESEND THE PACKET                 |
| 84031216     | Application |               | 10/24/2014  |            | PCT/US2014/062196  | PCT | END-TO-END NEGATIVE ACKNOWLEDGMENT                                                                            |
| 84031225     | Application |               | 11/20/2014  |            | PCT/US2014/066728  | PCT | VIRTUAL TARGET PORT AGGREGATION                                                                               |
| 84031253     | Application |               | 11/14/2014  |            | PCT/US2014/065615  | PCT | SECURE UPDATE OF FIRMWARE AND SOFTWARE                                                                        |
| 84031288     | Application |               | 1/5/2015    |            | PCT/US2015/010164  | PCT | MULTI-TENANT UPGRADING                                                                                        |
| 84031296     | Application |               | 12/22/2014  |            | PCT/US2014/071854  | PCT | FILE VALUE FILE REPLICATION                                                                                   |
| 84031327     | Application |               | 9/25/2014   |            | PCT/US2014/057463  | PCT | STORAGE SPACE ALLOCATION                                                                                      |
| 84031339     | Application |               | 10/31/2014  |            | PCT/US2014/063521  | PCT | ADAPTIVE COOLING ASSEMBLY                                                                                     |
| 84031365     | Application |               | 11/24/2014  |            | PCT/US2014/067009  | PCT | CHANNEL STATE INFORMATION FEEDBACK PERIOD DETERMINATION BASED ON WIRELESS COMMUNICATION DEVICE MOBILITY STATE |
|              |             |               |             |            |                    |     |                                                                                                               |
| 84031373     | Application |               | 10/30/2014  |            | PCT/US2014/063175  | PCT | PARALLEL BACKUP POWER SUPPLY                                                                                  |
| 84031388     | Application |               | 10/30/2014  |            | PCT/US2014/063106  | PCT | RESOURCE CONSUMING TASKS SCHEDULER                                                                            |
| 84031397     | Application |               | 10/31/2014  |            | PCT/US2014/063490  | PCT | BACKUP POWER SUPPLY CELL IN MEMORY DEVICE                                                                     |
| 84031433     | Application |               | 10/31/2014  |            | PCT/US2014/063548  | PCT | BACKUP POWER SUPPLY SUPPORT                                                                                   |
| 84031476     | Application |               | 9/25/2014   |            | PCT/US2014/057507  | PCT | STORAGE OF A DATA CHUNK WITH A COLLIDING FINGERPRINT                                                          |
| 84031480     | Application |               | 9/30/2014   |            | PCT/US2014/058174  | PCT | METRICS AUTHORIZATION BASED ON A CERTIFICATE                                                                  |
| 84031488     | Application |               | 12/19/2014  |            | PCT/US2014/071587  | PCT | AUTOMATIVE SYSTEM MANAGEMENT                                                                                  |
| 84031496     | Application |               | 11/4/2014   |            | PCT/US2014/063813  | PCT | SMART LOCATION DETERMINATION                                                                                  |
| 84031500     | Application |               | 9/24/2014   |            | PCT/US2014/057151  | PCT | UTILIZING ERROR CORRECTION (ECC) FOR SECURE SECRET SHARING                                                    |
| 84031508     | Application |               | 12/16/2014  |            | PCT/US2014/070608  | PCT | DISPLAY A SUBSET OF OBJECTS ON A USER INTERFACE                                                               |
| 84031516     | Application |               | 11/17/2014  |            | PCT/US2014/065948  | PCT | Snapshot Backup                                                                                               |

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| 84032971     | Application |               | 10/31/2014  |            | PCT/US2014/063535  | PCT | A Meta-Data Block Within a Non-Volatile Memory Device         |
| 84032996     | Application |               | 1/28/2015   |            | PCT/US2015/013222  | PCT | ELECTROSTATIC DISCHARGE MEMRISTIVE ELEMENT SWITCHING          |
| 84033005     | Application |               | 10/20/2014  |            | PCT/US2014/061375  | PCT | Clamp Circuit                                                 |
| 84033011     | Application |               | 10/24/2014  |            | PCT/US2014/062158  | PCT | INCREASING A READ MARGIN IN A READ CELL                       |
| 84033019     | Application |               | 10/29/2014  |            | PCT/US2014/062806  | PCT | CPU WITH EXTERNAL FAULT RESPONSE HANDLING                     |
| 84033028     | Application |               | 10/23/2014  |            | PCT/US2014/061965  | PCT | SUPERVISORY MEMORY MANAGEMENT UNIT                            |
| 84033033     | Application |               | 10/31/2014  |            | PCT/US2014/063330  | PCT | SENSING CIRCUIT FOR RESISTIVE MEMORY                          |
| 84033088     | Application |               | 10/23/2014  |            | PCT/US2014/062010  | PCT | MEMRISTIVE CROSS-BAR ARRAY FOR DETERMINING A DATA PRODUCT     |
| 84033096     | Application |               | 12/15/2014  |            | PCT/US2014/070266  | PCT | NONVOLATILE MEMORY CROSS-BAR ARRAY                            |
| 84033126     | Application |               | 1/16/2015   |            | PCT/IN2015/000024  | PCT | LOCATION AWARE FAILOVER SOLUTION                              |
| 84033134     | Application |               | 10/28/2014  |            | PCT/US2014/062694  | PCT | MEMCAPACITIVE CROSS-BAR ARRAY FOR DETERMINING A DATA PRODUCT  |
| 84033146     | Application |               | 9/26/2014   |            | PCT/US2014/057684  | PCT | ARRAYS OF BIT-CELLS                                           |
| 84033159     | Application |               | 11/18/2014  |            | PCT/US2014/066195  | PCT | MEMRISTIVE DOT PRODUCT ENGINE WITH A NULLING AMPLIFIER        |
| 84033163     | Application |               | 3/19/2015   |            | PCT/US2015/021410  | PCT | POST IN-DOUBT TRANSACTION TO NOTICE UNIT                      |
| 84033177     | Application |               | 9/29/2014   |            | PCT/US2014/057937  | PCT | DYNAMIC ALLOCATION OF FLOW TABLE CAPACITY                     |
| 84033194     | Application |               | 9/29/2014   |            | PCT/US2014/057970  | PCT | RETAIN DATA ABOVE THRESHOLD                                   |
| 84033205     | Application |               | 11/4/2014   |            | PCT/US2014/063826  | PCT | BRIDGE PORT EXTENDER                                          |
| 84033431     | Application |               | 12/23/2014  |            | PCT/US2014/072054  | PCT | RESOURCE PREDICTORS INDICATIVE OF PREDICTED RESOURCE USAGE    |
| 84033443     | Application |               | 11/24/2014  |            | PCT/US2014/067069  | PCT | DETERMINING A LOCATION OF A DISCONNECTED DEVICE               |
| 84033466     | Application |               | 10/31/2014  |            | PCT/US2014/063357  | PCT | DRAINING A WRITE QUEUE BASED ON INFORMATION FROM A READ QUEUE |
| 84033495     | Application |               | 10/24/2014  |            | PCT/US2014/062236  | PCT | TURNING MIRROR OPTICAL COUPLERS                               |
| 84033523     | Application |               | 12/9/2014   |            | PCT/US2014/069193  | PCT | INTERLOCK BRACKET UNIT                                        |
| 84033546     | Application |               | 10/27/2014  |            | PCT/US2014/062388  | PCT | MODULAR APPARATUSES AND SYSTEM FOR BACKPLANE CONNECTIONS      |
| 84033555     | Application |               | 10/30/2014  |            | PCT/US2014/063179  | PCT | TUNNEL ENCAPSULATION                                          |
| 84033563     | Application |               | 9/26/2014   |            | PCT/US2014/057712  | PCT | ITEM RECOMMENDATION                                           |
| 84033584     | Application |               | 10/31/2014  |            | PCT/US2014/063302  | PCT | ALTERNATE ADDRESS NETWORK LOGIN                               |
| 84033620     | Application |               | 12/19/2014  |            | PCT/US2014/071367  | PCT | BONDED FILTER SUBSTRATES                                      |
| 84033624     | Application |               | 10/27/2014  |            | PCT/US2014/062373  | PCT | DETERMINING TO PROCESS NETWORK PROTOCOL PACKETS               |
| 84033635     | Application |               | 10/27/2014  |            | PCT/US2014/062342  | PCT | CLASSIFICATION WITH A SWITCH                                  |

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| 84033847     | Application  |               | 1/22/2015   |            | PCT/US2015/012357  | PCT | MONOLITHIC WDM VCSEL ARRAYS BY QUANTUM WELL INTERMIXING                                                                                     |
| 84033861     | Application  |               | 10/27/2014  |            | PCT/US2014/062347  | PCT | An Artificial Peristaltic Device                                                                                                            |
| 84035433     | Application  |               | 11/25/2014  |            | PCT/US2014/067242  | PCT | SWITCH BETWEEN FIRST POWER SOURCE AND SECOND POWER SOURCE                                                                                   |
| 84035438     | Application  |               | 11/20/2014  |            | PCT/US2014/066671  | PCT | ADJUSTING A THRESHOLD OF STORAGE IN A BUFFER ACCORDING TO A LATENCY                                                                         |
| 84036538     | Application  |               | 9/30/2014   |            | PCT/US2014/058172  | PCT | EXECUTABLE CODE IN A MEDIA FILE                                                                                                             |
| 84036621     | Acknowledged |               |             |            | PCT                |     | Silicon Photonics based optical circuit switch                                                                                              |
| 84036929     | Application  |               | 12/17/2014  |            | PCT/US2014/070744  | PCT | TEMPERATURE GRADIENTS FOR CONTROLLING MEMRISTOR SWITCHING                                                                                   |
| 84037116     | Application  |               | 1/29/2015   |            | PCT/US2015/013606  | PCT | HASH INDEX                                                                                                                                  |
| 84037127     | Application  |               | 1/29/2015   |            | PCT/US2015/013608  | PCT | READ ONLY BUFFERPOOL                                                                                                                        |
| 84039763     | Application  |               | 9/5/2014    |            | PCT/US2014/054429  | PCT | Application Justification                                                                                                                   |
| 84042835     | Application  |               | 2/13/2015   |            | PCT/US2015/015973  | PCT | PARTITIONING MEMORY MODULES INTO VOLATILE AND NON-VOLATILE PORTIONS                                                                         |
| 84042840     | Application  |               | 11/20/2014  |            | PCT/US2014/066502  | PCT | DATA TRANSFER USING BACKUP POWER SUPPLY                                                                                                     |
| 84042858     | Application  |               | 12/18/2014  |            | PCT/US2014/071181  | PCT | STORAGE DRIVE ADAPTER                                                                                                                       |
| 84042872     | Application  |               | 11/24/2014  |            | PCT/US2014/067153  | PCT | WAIT STATE TRANSITION                                                                                                                       |
| 84044343     | Application  |               | 9/5/2014    |            | PCT/US2014/054349  | PCT | ENSURING DATA INTEGRITY OF A RETAINED FILE UPON REPLICATION                                                                                 |
| 84048829     | Application  |               | 9/18/2014   |            | PCT/US2014/056337  | PCT | FILE DIRECTORY STORAGE ON A STORAGE DEVICE                                                                                                  |
| 84051496     | Application  |               | 9/26/2014   |            | PCT/US2014/057858  | PCT | RECEPTACLE FOR CONNECTING A MULTI-LANE OR ONE-LANE CABLE                                                                                    |
| 84054144     | Application  |               | 41911       |            | PCT/EP2014/070838  | PCT | PROVISIONING A SERVICE                                                                                                                      |
| 84065503     | Published    |               | 12/8/2014   |            | PCT/US2014/069118  | PCT | PROVIDING POLICY INFORMATION                                                                                                                |
| 84079007     | Application  |               | 10/27/2014  |            | PCT/US2014/062398  | PCT | DYNAMICALLY APPLYING A PATCH TO A SHARED LIBRARY                                                                                            |
| 84080968     | Application  |               | 12/1/2014   |            | PCT/US2014/067937  | PCT | POLICY-BASED DATA PROTECTION                                                                                                                |
| 84084163     | Application  |               | 12/11/2014  |            | PCT/US2014/069753  | PCT | DETERMINING TERM SCORES BASED ON A MODIFIED INVERSE DOMAIN FREQUENCY                                                                        |
| 84084171     | Application  |               | 12/11/2014  |            | PCT/US2014/069766  | PCT | STRUCTURING OF SEMI-STRUCTURED LOG MESSAGES                                                                                                 |
| 84086347     | Application  |               | 12/1/2014   |            | PCT/US2014/067967  | PCT | FILE SYSTEM JOURNALING                                                                                                                      |
| 84088728     | Application  |               | 10/29/2014  |            | PCT/US2014/062928  | PCT | DETERMINING OPTIMUM RESOURCES FOR AN ASYMMETRIC DISASTER RECOVERY SITE OF A COMPUTER CLUSTER                                                |
| 84090838     | Application  |               | 3/3/2015    |            | PCT/US2015/018483  | PCT | DEVICE AUTHENTICATION AGENT                                                                                                                 |
| 84097743     | Application  |               | 11/4/2014   |            | PCT/US2014/063836  | PCT | NETWORK COMPATIBILITY DETERMINATION BASED ON FLOW REQUIREMENTS OF AN APPLICATION AND STORED FLOW CAPABILITIES OF A SOFTWARE-DEFINED NETWORK |

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| 84097759     | Application |               | 11/6/2014   |            | PCT/US2014/064241  | PCT | LINK AGGREGATION CONFIGURATION FOR A NODE IN A SOFTWARE-DEFINED NETWORK                                                         |
| 84104641     | Application |               | 1/30/2015   |            | PCT/US2015/013679  | PCT | REPLICATING NETWORK COMMUNICATIONS                                                                                              |
| 84107200     | Application |               | 11/13/2014  |            | PCT/US2014/065460  | PCT | CUSTOMIZED CLOUD SERVICE                                                                                                        |
| 84107329     | Application |               | 12/16/2014  |            | PCT/US2014/070570  | PCT | MANAGING A STORAGE POOL                                                                                                         |
| 84107609     | Application |               | 1/15/2015   |            | PCT/US2015/011564  | PCT | EXTENDED ATTRIBUTE STORAGE                                                                                                      |
| 84107627     | Application |               | 1/15/2015   |            | PCT/US2015/011607  | PCT | FILE SYSTEM CONFIGURATION DATA STORAGE                                                                                          |
| 84108001     | Application |               | 2/27/2015   |            | PCT/US2015/018088  | PCT | VISUALIZATION OF USER REVIEW DATA                                                                                               |
| 84109261     | Application |               | 11/24/2014  |            | PCT/US2014/066870  | PCT | KEYBOARD OFFSET COORDINATES                                                                                                     |
| 84111405     | Application |               | 12/23/2014  |            | PCT/US2014/072055  | PCT | DETECTION OF ALLERGEN EXPOSURE                                                                                                  |
| 84111422     | Application |               | 3/5/2015    |            | PCT/US2015/018865  | PCT | ACTIVATING AN ALARM IF A LIVING BEING IS PRESENT IN AN ENCLOSED SPACE WITH AMBIENT TEMPERATURE OUTSIDE A SAFE TEMPERATURE RANGE |
|              |             |               |             |            |                    |     | MULTILAYERED MEMRISTORS                                                                                                         |
| 84111434     | Application |               | 2/13/2015   |            | PCT/US2015/015729  | PCT | CONFIGURATION ITEM INTEGRITY                                                                                                    |
| 84111442     | Application |               | 1/27/2015   |            | PCT/US2015/013079  | PCT | MEMRISTOR FUNCTIONS BASED ON AN ORTHOGONAL ELECTRODE                                                                            |
| 84111450     | Application |               | 4/7/2015    |            | PCT/EP2015/057523  | PCT | ADJUSTING FAN SPEED BASED ON A STATE CHANGE OF A CHASSIS LID                                                                    |
| 84111454     | Application |               | 1/27/2015   |            | PCT/US2015/013076  | PCT | IN-LINE MEMORY MODULE CARRIER FOR AN M.2 FORM FACTOR MODULE                                                                     |
| 84111471     | Application |               | 1/27/2015   |            | PCT/US2015/013080  | PCT | VIRTUAL SPACE CALIBRATION                                                                                                       |
| 84111476     | Application |               | 1/30/2015   |            | PCT/US2015/013733  | PCT | RELATIONSHIP PRESERVING PROJECTION OF DIGITAL OBJECTS                                                                           |
| 84111488     | Application |               | 1/30/2015   |            | PCT/US2015/013742  | PCT | TIME-DEPENDENT DEMOGRAPHICS FOR DIGITAL BILLBOARDS                                                                              |
| 84111497     | Application |               | 1/30/2015   |            | PCT/US2015/013902  | PCT | VEHICLE DIAGNOSTIC DATA                                                                                                         |
| 84111505     | Application |               | 1/30/2015   |            | PCT/US2015/013905  | PCT | REDUCTION OF BACK REFLECTIONS                                                                                                   |
| 84111514     | Application |               | 2/20/2015   |            | PCT/US2015/016786  | PCT | OPTICAL FIBER DISTRIBUTION                                                                                                      |
| 84111557     | Application |               | 3/27/2015   |            | PCT/US2015/022936  | PCT | AUXILIARY POWER SOURCE BASED ON UTILIZATION                                                                                     |
| 84111565     | Application |               | 2/27/2015   |            | PCT/US2015/017958  | PCT | DETERMINING RESISTANCE STATES OF MEMRISTORS IN A CROSSBAR ARRAY                                                                 |
| 84111636     | Application |               | 2/24/2015   |            | PCT/US2015/017367  | PCT | FRAGMENTED PACKET PROCESSING RESOURCE DETERMINATION                                                                             |
| 84111640     | Application |               | 7/30/2015   |            | PCT/EP2015/067609  | PCT | Request Processing                                                                                                              |
| 84111648     | Application |               | 1/30/2015   |            | PCT/US2015/013963  | PCT | RESISTIVE MEMORY DEVICES AND ARRAYS                                                                                             |
| 84111665     | Application |               | 1/29/2015   |            | PCT/US2015/013494  | PCT | PREVENTING DATA CORRUPTION AND SINGLE POINT OF FAILURE IN A FAULT-TOLERANT MEMORY                                               |
| 84111674     | Application |               | 1/30/2015   |            | PCT/US2015/013817  | PCT | Video Management for Compute Nodes                                                                                              |
| 84111682     | Application |               | 5/21/2015   |            | PCT/US2015/031933  | PCT |                                                                                                                                 |

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| 84111686     | Application |               | 1/30/2015   |            | PCT/US2015/013898  | PCT | NON-IDEMPOTENT PRIMITIVES IN FAULT-TOLERANT MEMORY                               |
| 84111700     | Application |               | 2/24/2015   |            | PCT/US2015/017242  | PCT | DETERMINING A STATE OF A MEMRISTOR CELL                                          |
| 84111728     | Application |               | 1/16/2015   |            | PCT/US2015/011690  | PCT | MEMORY MANAGER                                                                   |
| 84111745     | Application |               | 4/6/2015    |            | PCT/US2015/024444  | PCT | ELECTRICALLY CONDUCTING OXYGEN DIFFUSION BARRIERS FOR MEMRISTORS AND SELECTORS   |
| 84111765     | Application |               | 3/9/2015    |            | PCT/CN2015/073871  | PCT | PREDICTING ACCESS POINT AVAILABILITY                                             |
| 84111769     | Application |               | 2/26/2015   |            | PCT/US2015/017676  | PCT | CHECKSUM REQUESTS OF FILES                                                       |
| 84111777     | Application |               | 1/26/2015   |            | PCT/US2015/012908  | PCT | REGULATING A POWER CONSUMPTION STATE OF A CELLULAR RADIO                         |
| 84111800     | Application |               | 1/30/2015   |            | PCT/US2015/014001  | PCT | CONNECTION TYPE DETECTION CIRCUIT                                                |
| 84111808     | Application |               | 12/22/2014  |            | PCT/US2014/071799  | PCT | RESPONSE TO AN INOPERATIVE NETWORK DEVICE MANAGED BY A CONTROLLER                |
| 84111823     | Application |               | 4/7/2015    |            | PCT/US2015/024704  | PCT | FORWARDING TABLE OF HYBRID SOFTWARE DEFINED NETWORKING SWITCH                    |
| 84111829     | Application |               | 1/12/2015   |            | PCT/US2015/011008  | PCT | DATA LINK LAYER INFORMATION                                                      |
| 84111849     | Application |               | 12/3/2014   |            | PCT/US2014/068465  | PCT | MODIFYING AN ADDRESS TO FORWARD A PACKET TO A SERVICE FUNCTION                   |
| 84111871     | Application |               | 1/22/2015   |            | PCT/US2015/012344  | PCT | ROUTER TO SEND A REQUEST FROM A FIRST SUBNET TO A SECOND SUBNET                  |
| 84111880     | Application |               | 11/28/2014  |            | PCT/US2014/067814  | PCT | VERIFYING A NETWORK CONFIGURATION                                                |
| 84111885     | Application |               | 3/13/2015   |            | PCT/US2015/020434  | PCT | DETERMINE ANOMALOUS BEHAVIOR BASED ON DYNAMIC DEVICE CONFIGURATION ADDRESS RANGE |
| 84111912     | Application |               | 4/2/2015    |            | PCT/US2015/024102  | PCT | INTERMEDIARY NETWORK ELEMENT FOR TAP TRAFFIC                                     |
| 84111929     | Application |               | 3/24/2015   |            | PCT/CN2015/074945  | PCT | FIELD PROGRAMMABLE GATE ARRAY MEMORY ALLOCATION                                  |
| 84111934     | Application |               | 6/3/2015    |            | PCT/US2015/033879  | PCT | DELAY OF ROUTE UPDATE COMMUNICATION                                              |
| 84111968     | Application |               | 1/29/2015   |            | PCT/US2015/013518  | PCT | PHOTONIC INTERCONNECT INCLUDING A CYCLIC ARRAYED WAVEGUIDE GRATING               |
| 84112767     | Application |               | 1/30/2015   |            | PCT/US2015/013954  | PCT | VALIDATING DATA IN A STORAGE ARRAY                                               |
| 84112779     | Application |               | 1/27/2015   |            | PCT/US2015/013144  | PCT | TRANSFERRING A VARIABLE DATA PAYLOAD                                             |
| 84112787     | Application |               | 1/28/2015   |            | PCT/US2015/013363  | PCT | RISER MATRIX                                                                     |
| 84112824     | Application |               | 2/19/2015   |            | PCT/US2015/016575  | PCT | ENABLING ADVANCED ERROR CORRECTION CONTROL ON SUBSET OF MEMORY CONTROLLERS       |
| 84112828     | Application |               | 1/30/2015   |            | PCT/US2015/013810  | PCT | DEDICATED MEMORY SERVER                                                          |
| 84112990     | Application |               | 3/12/2015   |            | PCT/US2015/020085  | PCT | POWER DISTRIBUTION PLAN                                                          |
| 84112999     | Application |               | 12/23/2014  |            | PCT/US2014/072020  | PCT | Automatically Rerunning Test Executions                                          |
| 84113013     | Application |               | 1/16/2015   |            | PCT/US2015/011810  | PCT | ROOT CAUSE ANALYSIS OF NON-DETERMINISTIC TESTS                                   |

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| 84113034     | Application |               | 2/17/2015   |            | PCT/US2015/016121  | PCT | STORAGE AREA NETWORK SWITCH REBOOT NOTIFICATION                                                                     |
| 84113056     | Application |               | 2/27/2015   |            | PCT/US2015/018000  | PCT | SOFTWARE DEFINED NETWORK CONTROLLER FOR IMPLEMENTING TENANT SPECIFIC POLICY                                         |
| 84113065     | Application |               | 12/1/2014   |            | PCT/US2014/067879  | PCT | STATUSES OF EXIT CRITERIA                                                                                           |
| 84113080     | Application |               | 4/7/2015    |            | PCT/US2015/024641  | PCT | BUILDING A DATA QUERY VISUALIZATION                                                                                 |
| 84113099     | Application |               | 1/29/2015   |            | PCT/US2015/013548  | PCT | APPLICATION RECORDING                                                                                               |
| 84113113     | Application |               | 1/30/2015   |            | PCT/US2015/013900  | PCT | COLLABORATIVE SECURITY LISTS                                                                                        |
| 84113134     | Application |               | 1/30/2015   |            | PCT/CN2015/071998  | PCT | IDENTIFYING HEARTBEAT MESSAGES                                                                                      |
| 84113140     | Application |               | 1/30/2015   |            | PCT/US2015/013762  | PCT | STORAGE DRIVE RISER                                                                                                 |
| 84113222     | Application |               | 5/11/2015   |            | PCT/US2015/030175  | PCT | BAFFLE WITH OPTICAL CONNECTOR                                                                                       |
| 84113239     | Application |               | 1/30/2015   |            | PCT/US2015/013678  | PCT | SYNTHESIZING A GRAPH                                                                                                |
| 84113260     | Application |               | 12/5/2014   |            | PCT/CN2014/093088  | PCT | MENU DISPLAY CONTROL                                                                                                |
| 84113265     | Application |               | 1/23/2015   |            | PCT/US2015/012722  | PCT | NON-UNIFORM MEMORY ACCESS AWARE MONITORING                                                                          |
| 84113311     | Application |               | 1/28/2015   |            | PCT/US2015/013250  | PCT | PRODUCT PORTFOLIO RATIONALIZATION                                                                                   |
| 84113323     | Application |               | 12/22/2014  |            | PCT/US2014/071834  | PCT | IDENTIFICATION OF APPLICATION MESSAGE TYPES                                                                         |
| 84113331     | Application |               | 1/30/2015   |            | PCT/US2015/013813  | PCT | Virtual Machines and File Services                                                                                  |
| 84113340     | Application |               | 4/1/2015    |            | PCT/US2015/023827  | PCT | GRAPHS WITH NORMALIZED ACTUAL VALUE MEASUREMENTS AND BASELINE BANDS REPRESENTATIVE OF NORMALIZED MEASUREMENT RANGES |
| 84113348     | Application |               | 1/29/2015   |            | PCT/US2015/013451  | PCT | Communications Over a Serial Attached Small Computer Interface (SAS)                                                |
| 84113360     | Application |               | 3/31/2015   |            | PCT/US2015/023491  | PCT | Inferring a Network Topology                                                                                        |
| 84113365     | Application |               | 1/29/2015   |            | PCT/US2015/013432  | PCT | HARD DISK DRIVE POWER REMOVAL                                                                                       |
| 84113369     | Application |               | 1/22/2015   |            | PCT/US2015/012455  | PCT | IN-LINE EDITOR INSERTION                                                                                            |
| 84113454     | Application |               | 5/1/2015    |            | PCT/US2015/028896  | PCT | SECURE MULTI-PARTY INFORMATION RETRIEVAL                                                                            |
| 84113752     | Application |               | 1/30/2015   |            | PCT/US2015/013946  | PCT | CUCKOO HASH TABLE                                                                                                   |
| 84113806     | Application |               | 3/12/2015   |            | PCT/US2015/020192  | PCT | MEMORY DEVICE WRITE BASED ON MAPPING                                                                                |
| 84113815     | Application |               | 1/30/2015   |            | PCT/US2015/013958  | PCT | ORDERING UPDATES FOR NONVOLATILE MEMORY ACCESSES                                                                    |
| 84113820     | Application |               | 5/15/2015   |            | PCT/US2015/031244  | PCT | PRICE, COMPLETION TIME, AND RESOURCE ALLOCATION DETERMINATION FOR CLOUD SERVICES                                    |
| 84113824     | Application |               | 1/23/2015   |            | PCT/US2015/012713  | PCT | HETEROGENEOUS PLATFORM CONFIGURATIONS                                                                               |
| 84113841     | Application |               | 2/27/2015   |            | PCT/US2015/018178  | PCT | MANUFACTURER-SIGNED DIGITAL CERTIFICATE FOR IDENTIFYING A CLIENT SYSTEM                                             |
| 84113909     | Application |               | 2/27/2015   |            | PCT/US2015/018053  | PCT | ANALYZING HARDWARE SYSTEMS                                                                                          |
| 84113929     | Application |               | 5/18/2015   |            | PCT/US2015/031380  | PCT | ASSET MANAGEMENT MODULES                                                                                            |
| 84113935     | Application |               | 3/6/2015    |            | PCT/US2015/019232  | PCT | GRAPH UPDATE FLUSH TO A SHARED MEMORY                                                                               |
| 84113950     | Application |               | 3/6/2015    |            | PCT/US2015/019295  | PCT | DYNAMIC API MANAGEMENT                                                                                              |
| 84114010     | Application |               | 3/18/2015   |            | PCT/US2015/021283  | PCT | SAS EXPANDER                                                                                                        |

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| 84114030     | Application |               | 4/10/2015   |            | PCT/US2015/025277  | PCT | MODIFYING WEB PAGE CODE TO INCLUDE CODE TO PROTECT OUTPUT                               |
| 84114284     | Application |               | 1/30/2015   |            | PCT/IN2015/000062  | PCT | DEPLOYING SOFTWARE PRODUCTS                                                             |
| 84114296     | Application |               | 2/27/2015   |            | PCT/US2015/018019  | PCT | RESPONSIVE SERVER IDENTIFICATION AMONG MULTIPLE DATA SERVERS LINKED TO A SHARED MEMORY  |
| 84114368     | Application |               | 1/28/2015   |            | PCT/US2015/013324  | PCT | NETWORK SWITCHING NODE WITH STATE MACHINE REPLICATION                                   |
| 84114376     | Application |               | 1/29/2015   |            | PCT/US2015/013545  | PCT | Multiple Computers On A Reconfigurable Circuit Board                                    |
| 84114393     | Application |               | 1/28/2015   |            | PCT/US2015/013354  | PCT | CONTROLLING THE RELEASE OF PERSONAL INFORMATION                                         |
| 84114402     | Application |               | 1/23/2015   |            | PCT/US2015/012767  | PCT | CONFIGURATION OF A VIRTUAL LOCAL AREA NETWORK IN A RING OF DEVICES                      |
| 84114407     | Application |               | 3/27/2015   |            | PCT/US2015/023044  | PCT | OPTIMIZE QUERY BASED ON UNIQUE ATTRIBUTE                                                |
| 84114422     | Application |               | 1/30/2015   |            | PCT/US2015/013986  | PCT | SENSORS FOR COOLING SYSTEM FLUID ATTRIBUTES                                             |
| 84114430     | Application |               | 1/29/2015   |            | PCT/US2015/013508  | PCT | HAMMING DISTANCE COMPUTATION                                                            |
| 84114439     | Application |               | 5/19/2015   |            | PCT/US2015/031647  | PCT | MOBILE ASSET COMPLIANCE EVALUATION                                                      |
| 84114490     | Application |               | 2/19/2015   |            | PCT/US2015/016537  | PCT | PROVIDER OFFER                                                                          |
| 84114505     | Application |               | 1/29/2015   |            | PCT/US2015/013443  | PCT | APPLICATION UPDATES                                                                     |
| 84114510     | Application |               | 1/27/2015   |            | PCT/US2015/013071  | PCT | VIRTUAL POINT OF SALE                                                                   |
| 84114522     | Application |               | 1/22/2015   |            | PCT/US2015/012356  | PCT | SESSION KEY REPOSITORY                                                                  |
| 84114528     | Application |               | 2/18/2015   |            | PCT/US2015/016392  | PCT | CONTINUOUS VIEWING MEDIA                                                                |
| 84114571     | Application |               | 2/27/2015   |            | PCT/US2015/018054  | PCT | MEMORY MODULE VOLTAGE REGULATOR MODULE (VRM)                                            |
| 84114597     | Application |               | 3/11/2015   |            | PCT/US2015/019840  | PCT | GENERATE NETWORK NAME BASED ON NETWORK NAMING STANDARD                                  |
| 84114602     | Application |               | 2/12/2015   |            | PCT/US2015/015562  | PCT | APPLYING A DEGREE OF TRANSPARENCY                                                       |
| 84114611     | Application |               | 1/16/2015   |            | PCT/US2015/011688  | PCT | VIDEO ENCODER                                                                           |
| 84114619     | Application |               | 6/25/2015   |            | PCT/US2015/037802  | PCT | BIG DATA TRANSFER                                                                       |
| 84114653     | Application |               | 3/31/2015   |            | PCT/US2015/023708  | PCT | PREVENTING DATA CORRUPTION AND SINGLE POINT OF FAILURE IN FAULT-TOLERANT MEMORY FABRICS |
| 84114722     | Application |               | 5/15/2015   |            | PCT/US2015/031256  | PCT | DYNAMICALLY CHANGING A POWER SUPPLY VOLTAGE TO A SYSTEM                                 |
| 84114728     | Application |               | 1/31/2015   |            | PCT/US2015/014009  | PCT | DETERMINATION OF STATUS BASED ON STATUS DOMAIN                                          |
| 84114743     | Application |               | 1/31/2015   |            | PCT/US2015/014010  | PCT | CONFIGURATIONS FOR IN-FACTORY AND POST-FACTORY USE                                      |
| 84114754     | Application |               | 1/26/2015   |            | PCT/US2015/012926  | PCT | RESOURCE ALLOCATION                                                                     |
| 84114763     | Application |               | 1/31/2015   |            | PCT/US2015/014008  | PCT | RESOURCE ALLOCATION                                                                     |
| 84114799     | Application |               | 1/29/2015   |            | PCT/US2015/013556  | PCT | Movable Rack                                                                            |
| 84114965     | Application |               | 1/30/2015   |            | PCT/US2015/013981  | PCT | INTEGRATED LIQUID COOLING OF A SERVER SYSTEM                                            |
| 84114991     | Application |               | 2/9/2015    |            | PCT/US2015/014980  | PCT | REDUNDANT POWER EXTENDER.                                                               |
| 84114995     | Application |               | 1/29/2015   |            | PCT/US2015/013598  | PCT | Cloud-Hosted User Authentication                                                        |

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| 84115008     | Application |               | 1/13/2015   |            | PCT/US2015/011198  | PCT | DATA CENTER CONFIGURATION                                                                    |
| 84115017     | Application |               | 4/22/2015   |            | PCT/US2015/027177  | PCT | STORAGE SYSTEM ENCLOSURES                                                                    |
| 84115052     | Application |               | 1/16/2015   |            | PCT/US2015/011763  | PCT | PLENUM TO DELIVER COOL AIR AND ROUTE MULTIPLE CABLES                                         |
| 84115060     | Application |               | 2/27/2015   |            | PCT/US2015/018131  | PCT | SELECTIVELY ENABLING BACKUP POWER TO NODES                                                   |
| 84115636     | Application |               | 5/20/2015   |            | PCT/US2015/031699  | PCT | VIRTUAL MACHINE DATA PROTECTION                                                              |
| 84115658     | Application |               | 4/27/2015   |            | PCT/US2015/027808  | PCT | MEMRISTIVE CROSSBAR ARRAY HAVING MULTI-SELECTOR MEMRISTOR CELLS                              |
| 84115761     | Application |               | 1/30/2015   |            | PCT/US2015/013987  | PCT | MULTIPLE USER DATA STORAGE AND SEPARATION                                                    |
| 84115765     | Application |               | 1/29/2015   |            | PCT/US2015/013540  | PCT | NET PROMOTER SCORE DETERMINATION                                                             |
| 84115798     | Application |               | 3/10/2015   |            | PCT/US2015/019792  | PCT | AUTHORIZATION FOR MULTIPLE USER DATA STORAGE AND SEPARATION                                  |
| 84115813     | Application |               | 3/10/2015   |            | PCT/US2015/019788  | PCT | WORKFLOW MANAGEMENT FOR MULTIPLE USER DATA STORAGE AND SEPARATION                            |
| 84115821     | Application |               | 1/30/2015   |            | PCT/US2015/013759  | PCT | PERFORMANCE TESTING BASED ON VARIABLE LENGTH SEGMENTATION AND CLUSTERING OF TIME SERIES DATA |
| 84115825     | Application |               | 12/19/2014  |            | PCT/US2014/071619  | PCT | COLLABORATION WITH 3D DATA VISUALIZATIONS                                                    |
| 84115841     | Application |               | 3/12/2015   |            | PCT/US2015/020164  | PCT | PROGRESSIVE INTERACTIVE APPROACH FOR BIG DATA ANALYTICS                                      |
| 84116328     | Application |               | 1/29/2015   |            | PCT/US2015/013554  | PCT | PROCESSING AN ELECTRONIC DATA STREAM USING A GRAPH DATA STRUCTURE                            |
|              |             |               |             |            |                    |     |                                                                                              |
| 84136817     | Application |               | 1/15/2015   |            | PCT/US2015/011582  | PCT | Online File System Check                                                                     |
| 84141071     | Application |               | 1/30/2015   |            | PCT/US2015/013798  | PCT | PROTECTION AGAINST DATABASE INJECTION ATTACKS                                                |
| 84144131     | Application |               | 2/6/2015    |            | PCT/US2015/014724  | PCT | CORRELATION ENGINE COMPRISING ROOT CAUSE AND SERVICE IMPACT ANALYSES                         |
| 84152848     | Application |               | 2/11/2015   |            | PCT/US2015/015474  | PCT | NETWORK SERVICE CHAIN CONSTRUCTION                                                           |
| 84155504     | Application |               | 6/3/2015    |            | PCT/US2015/033989  | PCT | DATA RETENTIONS                                                                              |
| 84155521     | Application |               | 5/14/2015   |            | PCT/US2015/030873  | PCT | DATA TRANSFERS BASED ON STATE TRANSITION DETECTIONS                                          |
| 84160281     | Application |               | 6/30/2015   |            | PCT/US2015/038532  | PCT | CLOUD SERVICE TUNING                                                                         |
| 84160422     | Application |               | 2/13/2015   |            | PCT/US2015/015867  | PCT | Data Deduplication                                                                           |
| 84169137     | Application |               | 8/17/2015   |            | PCT/US2015/045492  | PCT | CONFIDENCE INDICATOR OF UNRECEIVED SECURITY MESSAGE                                          |
| 84169141     | Application |               | 7/1/2015    |            | PCT/US2015/038775  | PCT | LATENCY MEASURER                                                                             |
| 84169644     | Application |               | 4/17/2015   |            | PCT/US2015/026281  | PCT | DETERMINING RESISTIVE STATE OF MEMRISTORS                                                    |
| 84169805     | Application |               | 5/12/2015   |            | PCT/US2015/030370  | PCT | NON-VOLATILE RESISTANCE MEMORY DEVICES INCLUDING A VOLATILE SELECTOR                         |
| 84169813     | Application |               | 4/10/2015   |            | PCT/US2015/025450  | PCT | TEMPERATURE COMPENSATION CIRCUITS                                                            |

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| 84169827     | Application |               | 6/5/2015    |            | PCT/US2015/034539  | PCT | READ CIRCUITRY FOR ELECTROSTATIC DISCHARGE SWITCHING MEMRISTIVE ELEMENT |
| 84169847     | Application |               | 8/13/2015   |            | PCT/US2015/045091  | PCT | RECONFIGURABLE INTERCONNECTED NODES                                     |
| 84169851     | Application |               | 8/10/2015   |            | PCT/US2015/044482  | PCT | LOW IMPEDANCE VCSELS                                                    |
| 84169859     | Application |               | 9/23/2015   |            | PCT/US2015/051688  | PCT | Storage Memory Direct Access                                            |
| 84169867     | Application |               | 6/4/2015    |            | PCT/US2015/034272  | PCT | MONOLITHIC WDM VCSELS WITH SPATIALLY VARYING GAIN PEAK                  |
|              |             |               |             |            |                    |     | AND FABRY PEROT WAVELENGTH                                              |
| 84169888     | Application |               | 5/22/2015   |            | PCT/US2015/032190  | PCT | TRAFFIC MANAGEMENT SYSTEM                                               |
| 84170050     | Application |               | 3/13/2015   |            | PCT/US2015/020480  | PCT | CONFIGURING MANAGED DEVICES                                             |
| 84170122     | Application |               | 3/26/2015   |            | PCT/US2015/022805  | PCT | REGISTRATION INFORMATION                                                |
| 84170154     | Application |               | 7/29/2015   |            | PCT/US2015/042661  | PCT | FIREWALL TO DETERMINE ACCESS TO A PORTION OF MEMORY                     |
| 84170196     | Application |               | 7/28/2015   |            | PCT/US2015/042506  | PCT | DATABASE QUERY CLASSIFICATION                                           |
| 84170222     | Application |               | 4/22/2015   |            | PCT/US2015/027029  | PCT | COMMUNICATION USING PHASE MODULATION OVER AN INTERCONNECT               |
| 84170259     | Application |               | 4/24/2015   |            | PCT/CN2015/077391  | PCT | TRANSACTION MANAGEMENT AND COMMITTING                                   |
| 84170263     | Application |               | 4/28/2015   |            | PCT/US2015/028042  | PCT | MAP TABLES FOR HARDWARE TABLES                                          |
| 84170274     | Application |               | 5/21/2015   |            | PCT/US2015/032570  | PCT | DATA VALIDATION                                                         |
| 84170314     | Application |               | 5/28/2015   |            | PCT/US2015/032923  | PCT | DEPENDENCY RANK BASED ON COMMIT HISTORY                                 |
| 84170323     | Application |               | 4/30/2015   |            | PCT/US2015/028623  | PCT | MIGRATING DATA USING DUAL-PORT NON-VOLATILE DUAL IN-LINE MEMORY MODULES |
| 84170331     | Application |               | 4/24/2015   |            | PCT/US2015/027474  | PCT | CONTEXT-AWARE CHECKLISTS                                                |
| 84170357     | Application |               | 4/28/2015   |            | PCT/US2015/027901  | PCT | Hardware for System Firmware Use                                        |
| 84170371     | Application |               | 4/27/2015   |            | PCT/US2015/027760  | PCT | VIRTUALIZED FAN SPEED MEASUREMENT                                       |
| 84170383     | Application |               | 6/18/2015   |            | PCT/US2015/036438  | PCT | TRANSMITTING CONTENTS OF AN OPERATION FIELD TO A MEDIA CONTROLLER       |
| 84170391     | Application |               | 7/14/2015   |            | PCT/US2015/040287  | PCT | DETERMINING FIRST WRITE STRENGTH                                        |
| 84170426     | Application |               | 5/28/2015   |            | PCT/US2015/032827  | PCT | TRANSLATION OF SOURCE M-NODE IDENTIFIER TO TARGET M-NODE IDENTIFIER     |
| 84171250     | Application |               | 4/30/2015   |            | PCT/US2015/028648  | PCT | Consolidated Metadata In Databases                                      |
| 84171258     | Application |               | 4/28/2015   |            | PCT/US2015/028044  | PCT | MEMRISTOR APPARATUS WITH VARIABLE TRANSMISSION DELAY                    |
| 84171262     | Application |               | 6/19/2015   |            | PCT/US2015/036720  | PCT | HANDLING ERRORS DURING RUN TIME BACKUPS                                 |
| 84171278     | Application |               | 4/30/2015   |            | PCT/US2015/028651  | PCT | Monitoring Application Operations Using User Interaction Times          |
| 84171308     | Application |               | 4/22/2015   |            | PCT/US2015/027051  | PCT | CONFIGURING NETWORK DEVICES                                             |
| 84171319     | Application |               | 4/30/2015   |            | PCT/US2015/028597  | PCT | PERIPHERAL DEVICE SERVER ACCESS                                         |
| 84171328     | Application |               | 5/11/2015   |            | PCT/US2015/030144  | PCT | PERIPHERAL DEVICE SECURITY                                              |

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| 84171362     | Application |               | 4/30/2015   |            | PCT/US2015/028605  | PCT | UPLINK PORT OVERSUBSCRIPTION DETERMINATION                                         |
| 84171367     | Application |               | 4/20/2015   |            | PCT/US2015/026652  | PCT | CONFIGURATION OF CONFIGURABLE COMPONENTS                                           |
| 84171379     | Application |               | 5/12/2015   |            | PCT/US2015/030297  | PCT | SERVER DISCRETE SIDE INFORMATION                                                   |
| 84171391     | Application |               | 4/30/2015   |            | PCT/US2015/028522  | PCT | Cooling Via a Sleeve Connector                                                     |
| 84171410     | Application |               | 3/18/2015   |            | PCT/US2015/021284  | PCT | AUTOMATIC DETECTION OF OUTLIERS IN MULTIVARIATE DATA                               |
| 84171430     | Application |               | 5/29/2015   |            | PCT/US2015/033167  | PCT | TRANSFERRING AN IMAGE FILE OVER A NETWORK                                          |
| 84171442     | Application |               | 5/15/2015   |            | PCT/US2015/030993  | PCT | DEVICE MOUNTS                                                                      |
| 84171450     | Application |               | 4/30/2015   |            | PCT/US2015/028596  | PCT | EXTRACTING DATA FROM NETWORK COMMUNICATIONS                                        |
| 84171462     | Application |               | 5/18/2015   |            | PCT/US2015/031316  | PCT | DETECTING AN ERRONEOUSLY STORED DATA OBJECT IN A DATA CONTAINER                    |
| 84171470     | Application |               | 5/19/2015   |            | PCT/US2015/031463  | PCT | DATABASE COMPARISON OPERATION TO IDENTIFY AN OBJECT                                |
| 84171536     | Application |               | 5/19/2015   |            | PCT/US2015/031499  | PCT | UPDATING INFERENCE GRAPH ABSENT NODE LOCKING                                       |
| 84171593     | Application |               | 5/22/2015   |            | PCT/US2015/032212  | PCT | MARGINAL DISTRIBUTION IN A GRAPHICAL MODEL                                         |
| 84171599     | Application |               | 5/1/2015    |            | PCT/US2015/028952  | PCT | THROTTLED DATA MEMORY ACCESS                                                       |
| 84172444     | Application |               | 3/23/2015   |            | PCT/US2015/022068  | PCT | COMPILING NETWORK POLICIES                                                         |
| 84172452     | Application |               | 3/31/2015   |            | PCT/US2015/023474  | PCT | NETWORK POLICY DISTRIBUTION                                                        |
| 84172464     | Application |               | 4/23/2015   |            | PCT/US2015/027257  | PCT | PRE-FILTER RULES FOR NETWORK INFRASTRUCTURE DEVICES                                |
| 84172478     | Application |               | 4/9/2015    |            | PCT/EP2015/057790  | PCT | REMOVING LIBRARY OBJECTS FROM A STATIC LIBRARY                                     |
| 84172710     | Application |               | 3/25/2015   |            | PCT/US2015/022527  | PCT | FAST FAILOVER RECOVERY IN SOFTWARE DEFINED NETWORKS                                |
| 84172718     | Application |               | 3/12/2015   |            | PCT/US2015/020280  | PCT | FREQUENCY OF A CLOCK SIGNAL                                                        |
| 84172759     | Application |               | 3/4/2015    |            | PCT/US2015/018733  | PCT | MULTIPLE PINS OF DIFFERENT LENGTHS CORRESPONDING TO DIFFERENT DATA SIGNALING RATES |
| 84172764     | Application |               | 4/30/2015   |            | PCT/US2015/028439  | PCT | JOURNEY AND CHARGE PRESENTATIONS AT MOBILE DEVICES                                 |
| 84172796     | Application |               | 4/17/2015   |            | PCT/US2015/026273  | PCT | DYNAMIC MESSAGING FOR AN APPLICATION PROGRAMMING INTERFACE                         |
| 84172804     | Application |               | 4/29/2015   |            | PCT/US2015/028110  | PCT | DATA PROTECTION                                                                    |
| 84172819     | Application |               | 4/10/2015   |            | PCT/US2015/025465  | PCT | NETWORK ADDRESS OF A COMPUTING DEVICE                                              |
| 84172847     | Application |               | 3/12/2015   |            | PCT/US2015/020290  | PCT | COMPUTING DEVICE LOCATION                                                          |
| 84172881     | Application |               | 5/28/2015   |            | PCT/US2015/032814  | PCT | DETERMINING POTENTIAL TEST ACTIONS                                                 |
| 84172885     | Application |               | 5/4/2015    |            | PCT/US2015/029007  | PCT | DETERMINING IDLE TESTING PERIODS                                                   |
| 84172893     | Application |               | 8/4/2015    |            | PCT/US2015/043574  | PCT | COMPOSING FUTURE TESTS                                                             |
| 84172927     | Application |               | 3/31/2015   |            | PCT/US2015/023649  | PCT | FILE SYSTEM REPLICATION                                                            |
| 84172931     | Application |               | 5/29/2015   |            | PCT/US2015/033382  | PCT | WATER WALL                                                                         |
| 84172953     | Application |               | 7/24/2015   |            | PCT/US2015/041883  | PCT | LOCK MANAGER                                                                       |
| 84173002     | Application |               | 4/8/2015    |            | PCT/US2015/024975  | PCT | Pre-Boot Device Configuration                                                      |

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| 84173010     | Application |               | 4/7/2015    |            | PCT/US2015/024707  | PCT | HYBRID COOLING CONTROL OF A COMPUTING SYSTEM                                                   |
| 84173019     | Application |               | 4/20/2015   |            | PCT/US2015/026674  | PCT | SUPPLEMENTAL AIR COOLING                                                                       |
| 84173028     | Application |               | 5/15/2015   |            | PCT/US2015/031212  | PCT | SENSOR DATA                                                                                    |
| 84173065     | Application |               | 7/31/2015   |            | PCT/US2015/043135  | PCT | Optical Jumper                                                                                 |
| 84173085     | Application |               | 5/15/2015   |            | PCT/US2015/031121  | PCT | BOOTING A NETWORK DEVICE COUPLED TO A STORAGE DEVICE IN A STORAGE AREA NETWORK (SAN)           |
| 84173234     | Application |               | 4/30/2015   |            | PCT/US2015/028448  | PCT | DETECTING TRANSITIONS                                                                          |
| 84173588     | Application |               | 7/30/2015   |            | PCT/US2015/042953  | PCT | INTERLEAVED ACCESS OF MEMORY                                                                   |
| 84173626     | Application |               | 4/17/2015   |            | PCT/US2015/026398  | PCT | HIERARCHICAL CLASSIFIERS                                                                       |
| 84173634     | Application |               | 4/17/2015   |            | PCT/US2015/026476  | PCT | ORGANIZING AND STORING NETWORK COMMUNICATIONS                                                  |
| 84173649     | Application |               | 5/28/2015   |            | PCT/EP2015/061892  | PCT | LINKING DATASETS                                                                               |
| 84173654     | Application |               | 4/27/2015   |            | PCT/EP2015/059047  | PCT | Peer to Peer Management of Distributed Memory Fabrics                                          |
| 84173677     | Application |               | 9/22/2015   |            | PCT/US2015/051376  | PCT | FILE MANAGEMENT                                                                                |
| 84173686     | Application |               | 5/29/2015   |            | PCT/US2015/033285  | PCT | STORAGE AREA NETWORK ZONE SET                                                                  |
| 84173700     | Application |               | 6/11/2015   |            | PCT/US2015/035333  | PCT | NETWORK FRAME HOLD TIME PARAMETER                                                              |
| 84173706     | Application |               | 5/15/2015   |            | PCT/US2015/031263  | PCT | MAXIMIZING INFORMATION VALUE OF WEB CONTENT                                                    |
| 84185714     | Application |               | 3/16/2015   |            | PCT/US2015/020645  | PCT | UPDATING A VIRTUAL NETWORK TOPOLOGY BASED ON MONITORED APPLICATION DATA                        |
| 84190157     | Application |               | 3/23/2015   |            | PCT/US2015/022074  | PCT | IMPLEMENTING POLICY INSTRUCTIONS IN MULTIPLE TABLES                                            |
| 84191036     | Application |               | 3/23/2015   |            | PCT/US2015/022071  | PCT | Access control to a portion of a file system object                                            |
| 84193887     | Application |               | 3/20/2015   |            | PCT/US2015/021764  | PCT | ANALYSIS OF INFORMATION IN A COMBINATION OF A STRUCTURED DATABASE AND AN UNSTRUCTURED DATABASE |
| 84194256     | Application |               | 3/25/2015   |            | PCT/US2015/022486  | PCT | PROVIDING DATA FROM DATA SOURCES                                                               |
| 84195045     | Application |               | 3/20/2015   |            | PCT/US2015/021714  | PCT | SUGGESTIONS FOR DIGITAL FORMS                                                                  |
| 84202537     | Application |               | 4/23/2015   |            | PCT/US2015/027195  | PCT | FAILURE ATOMIC UPDATE OF APPLICATION DATA FILES                                                |
| 84212650     | Application |               | 4/24/2015   |            | PCT/US2015/027419  | PCT | DETECTING INCONSISTENCIES IN HIERARCHICAL ORGANIZATION DIRECTORIES                             |
| 84220212     | Application |               | 7/22/2015   |            | PCT/US2015/041547  | PCT | ADDING METADATA ASSOCIATED WITH A COMPOSITE NETWORK POLICY                                     |
| 84220221     | Application |               | 7/30/2015   |            | PCT/US2015/043020  | PCT | Data Center Network Flow Inference with Compressed Flow Sketching                              |
| 84232546     | Application |               | 4/24/2015   |            | PCT/US2015/027547  | PCT | FLOW SAMPLE                                                                                    |
| 84235214     | Application |               | 5/4/2015    |            | PCT/US2015/029066  | PCT | Restoring a flow path in response to a link failure in a software defined network (SDN)        |
| 84251685     | To Be Filed |               |             |            |                    | PCT | VIRTUAL MACHINE STORAGE MANAGEMENT                                                             |

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| 84251690     | Instructed  |               |             |            |                    | PCT | Sorting on a multi-node, multi-core system with a memm |
| 84251713     | Application |               | 9/2/2015    |            | PCT/CN2015/088871  | PCT | REPLICATING CHAIN OF AGENTS                            |
| 84251719     | Application |               | 8/21/2015   |            | PCT/US2015/046418  | PCT | DIGITAL CONTEXT-AWARE MONITORING                       |
| 84251740     | Application |               | 9/16/2015   |            | PCT/US2015/050456  | PCT | CONFIDENCE LEVELS IN REPUTABLE ENTITIES                |
| 84251745     | Application |               | 6/26/2015   |            | PCT/US2015/038129  | PCT | SHARING OF COMMUNITY-BASED SECURITY INFORMATION        |
| 84251788     | Application |               | 9/25/2015   |            | PCT/US2015/052447  | PCT | ASSOCIATIONS AMONG DATA RECORDS IN A SECURITY          |
| 84255627     | Application |               | 9/11/2015   |            | PCT/US2015/049717  | PCT | INFORMATION SHARING PLATFORM                           |
| 84255632     | Application |               | 6/16/2015   |            | PCT/US2015/036061  | PCT | POWER DISTRIBUTION WITH BATTERIES                      |
| 84259536     | Application |               | 6/30/2015   |            | PCT/US2015/038507  | PCT | BATTERY CHARGE VOLTAGE BASED ON AMBIENT                |
| 84259957     | Application |               | 5/28/2015   |            | PCT/US2015/032933  | PCT | TEMPERATURE                                            |
| 84259975     | Application |               | 7/24/2015   |            | PCT/US2015/042009  | PCT | TAGGED CONTENT DISTRIBUTION                            |
| 84259983     | Application |               | 42216       |            | PCT/US2015/043107  | PCT | Scalable Cloud Storage Solution                        |
| 84260009     | Application |               | 42146       |            | PCT/US2015/032117  | PCT | ENABLING COMPRESSION OF A VIDEO OUTPUT                 |
| 84260018     | Application |               | 8/10/2015   |            | PCT/US2015/044502  | PCT | DATA SENSING IN CROSSPOINT MEMORY STRUCTURES           |
| 84260026     | Application |               | 7/24/2015   |            | PCT/US2015/042004  | PCT | HYBRID SELECTORS                                       |
| 84260058     | Application |               | 7/20/2015   |            | PCT/US2015/041150  | PCT | USING A SHARED PRIORITY QUEUE FOR MULTI-THREADED       |
| 84260066     | Application |               | 8/7/2015    |            | PCT/US2015/044315  | PCT | SEARCHING                                              |
| 84260072     | Application |               | 8/10/2015   |            | PCT/US2015/044478  | PCT | MODIFICATION OF A BUS CHANNEL                          |
| 84260103     | Application |               | 7/9/2015    |            | PCT/US2015/039754  | PCT | PROCESSING TIME-VARYING DATA USING A GRAPH DATA        |
| 84260107     | Application |               | 7/23/2015   |            | PCT/US2015/041668  | PCT | STRUCTURE                                              |
| 84260129     | Application |               | 6/5/2015    |            | PCT/US2015/034370  | PCT | PROCESSING DEVICE OPERATION ENABLEMENT                 |
| 84260141     | Application |               | 7/21/2015   |            | PCT/US2015/041362  | PCT | EVALUATING SYSTEM BEHAVIOUR                            |
| 84260152     | Application |               | 6/5/2015    |            | PCT/US2015/034431  | PCT | NON-VOLATILE MEMORY DIE DATA MIRRORING                 |
| 84260169     | Application |               | 6/5/2015    |            | PCT/US2015/034490  | PCT | LOAD GENERATOR WITH A TOKEN MACHINE                    |
| 84260181     | Application |               | 8/31/2015   |            | PCT/US2015/047660  | PCT | PRICING OF CLOUD RESOURCES                             |
| 84260189     | Application |               | 9/14/2015   |            | PCT/US2015/050036  | PCT | PROVIDING POWER TO A SERVER                            |
| 84260206     | Application |               | 7/24/2015   |            | PCT/US2015/042134  | PCT | PRICING OF CLOUD RESOURCES                             |
| 84260223     | Application |               | 9/8/2015    |            | PCT/US2015/048866  | PCT | PRICE, COMPLETION TIME, AND RESOURCE ALLOCATION        |
| 84260281     | Application |               | 6/26/2015   |            | PCT/US2015/038015  | PCT | DETERMINATION FOR CLOUD SERVICES                       |
| 84260582     | Application |               | 7/30/2015   |            | PCT/US2015/042810  | PCT | PHYSICAL MEMORY REGION BACKUP OF A VOLATILE            |
| 84261417     | Application |               | 7/31/2015   |            | PCT/US2015/043104  | PCT | MEMORY TO A NON-VOLATILE MEMORY                        |
|              |             |               |             |            |                    |     | MEMORY LOCATION REMAPPING AND WEAR-LEVELING            |
|              |             |               |             |            |                    |     | DISTRIBUTED DATASETS IN SHARED NON-VOLATILE MEMORY     |
|              |             |               |             |            |                    |     | MULTICASTING IN SHARED NON-VOLATILE MEMORY             |
|              |             |               |             |            |                    |     | SELF-TUNE CONTROLLER                                   |
|              |             |               |             |            |                    |     | LOCK CONTROL                                           |
|              |             |               |             |            |                    |     | FAULT TOLERANT COMPUTING                               |

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| 84261434     | Application |               | 5/29/2015   |            | PCT/US2015/033120  | PCT | APPLICATION OF NETWORK FLOW RULE ACTION BASED PACKET COUNTER                                                                                                                |
| 84261443     | Application |               | 7/31/2015   |            | PCT/US2015/043165  | PCT | Hybrid coherence: A combination of directory-based and snoopy coherence with dynamic mode switching for accelerated node-to-node transfers in systems with high node counts |
| 84261451     | Application |               | 7/27/2015   |            | PCT/US2015/042260  | PCT | HEAT DISSIPATION FOR DIES                                                                                                                                                   |
| 84261475     | Application |               | 5/28/2015   |            | PCT/US2015/032986  | PCT | SECURITY VULNERABILITY DETECTION                                                                                                                                            |
| 84261521     | Application |               | 6/26/2015   |            | PCT/CN2015/082512  | PCT | LATENT TOPIC DETERMINATION                                                                                                                                                  |
| 84261529     | Application |               | 8/14/2015   |            | PCT/US2015/045327  | PCT | DYNAMIC LEXER OBJECT CONSTRUCTION                                                                                                                                           |
| 84261626     | Application |               | 8/28/2015   |            | PCT/US2015/047474  | PCT | SOFTWARE PATCH FIX BASED ON CHECKSUMS                                                                                                                                       |
| 84262279     | Application |               | 8/12/2015   |            | PCT/US2015/044849  | PCT | Serdes Link Management                                                                                                                                                      |
| 84262290     | Application |               | 7/23/2015   |            | PCT/US2015/041815  | PCT | BIOS Controlled Method for Preserving System Volatile Memory to Persistent Storage                                                                                          |
| 84262328     | Application |               | 7/30/2015   |            | PCT/US2015/042992  | PCT | NETWORK TRAFFIC PATTERN BASED MACHINE READABLE INSTRUCTION IDENTIFICATION                                                                                                   |
| 84262411     | Application |               | 7/17/2015   |            | PCT/US2015/040877  | PCT | MEMRISTOR ARRAY WITH ACTIVE MEMRISTORS                                                                                                                                      |
| 84262516     | Application |               | 8/14/2015   |            | PCT/US2015/045376  | PCT | MECHANISMS TO RESET CIRCUIT BREAKERS                                                                                                                                        |
| 84262520     | Application |               | 6/5/2015    |            | PCT/US2015/034375  | PCT | DATA BLOCK WRITE MAPPED TO MEMORY BANK                                                                                                                                      |
| 84262528     | Application |               | 7/31/2015   |            | PCT/US2015/043303  | PCT | BLIND MATE SLEDS AND BASES FOR STORAGE DEVICES                                                                                                                              |
| 84262571     | Application |               | 9/23/2015   |            | PCT/US2015/051612  | PCT | SIDEWALL ANTI-CATION-DIFFUSION BARRIER                                                                                                                                      |
| 84262583     | Application |               | 9/24/2015   |            | PCT/US2015/051807  | PCT | COMMUNICATION PATH LOSS                                                                                                                                                     |
| 84262639     | Application |               | 9/24/2015   |            | PCT/US2015/051882  | PCT | SELECTOR WITH POROUS OXIDE LAYER                                                                                                                                            |
| 84262683     | Application |               | 7/27/2015   |            | PCT/US2015/042188  | PCT | COMPONENT COMPATIBILITY VERIFICATION                                                                                                                                        |
| 84262702     | Application |               | 7/22/2015   |            | PCT/US2015/041594  | PCT | STARTUP CIRCUIT TO INITIALIZE VOLTAGE REFERENCE CIRCUIT                                                                                                                     |
| 84262714     | Application |               | 9/23/2015   |            | PCT/US2015/051596  | PCT | SNAPSHOT STORAGE MANAGEMENT                                                                                                                                                 |
| 84262720     | Application |               | 7/30/2015   |            | PCT/US2015/043026  | PCT | FIRMWARE UPDATE OF AN INTERCONNECT DEVICE                                                                                                                                   |
| 84262748     | Application |               | 9/4/2015    |            | PCT/US2015/048713  | PCT | SECURE LOGIN INFORMATION                                                                                                                                                    |
| 84262768     | Application |               | 7/8/2015    |            | PCT/US2015/039543  | PCT | PHOTONIC CIRCUIT DESIGN SYSTEMS                                                                                                                                             |
| 84262780     | Application |               | 6/1/2015    |            | PCT/US2015/033530  | PCT | RING PROTECTION NETWORK MODULE                                                                                                                                              |
| 84262792     | Application |               | 9/4/2015    |            | PCT/US2015/048728  | PCT | HYBRID GRAPH PROCESSING                                                                                                                                                     |
| 84262797     | To Be Filed |               |             |            |                    | PCT | A High-Performance In-Memory Data Shuffling Engine                                                                                                                          |
| 84262805     | Application |               | 7/23/2015   |            | PCT/US2015/041735  | PCT | RING WAVEGUIDE MODULATORS                                                                                                                                                   |
| 84262817     | Application |               | 9/4/2015    |            | PCT/US2015/048492  | PCT | PUMP BASED ISSUE IDENTIFICATION                                                                                                                                             |
| 84262834     | To Be Filed |               |             |            |                    | PCT | Usage Hints for Shared Data Structures                                                                                                                                      |
| 84262851     | Application |               | 7/23/2015   |            | PCT/US2015/041814  | PCT | MIGRATION FOR CLOUD MANAGEMENT SYSTEMS                                                                                                                                      |
| 84262892     | Application |               | 7/31/2015   |            | PCT/US2015/043207  | PCT | ACTIVATION OF A SWITCH TO INCREASE DUTY CYCLE                                                                                                                               |
| 84262900     | Application |               | 6/4/2015    |            | PCT/US2015/034276  | PCT | DETERMINING LOCATION OF WIRELESS-ENABLED DEVICE                                                                                                                             |
| 84262908     | Application |               | 6/22/2015   |            | PCT/US2015/036901  | PCT | CONTROL OF APPLICATION LOG CONTENT                                                                                                                                          |

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| 84262963     | Application  |               | 7/30/2015   |            | PCT/US2015/042890  | PCT | Transceiver Module                                                                                                  |
| 84262972     | Application  |               | 7/31/2015   |            | PCT/US2015/043189  | PCT | Multi-Chip Module                                                                                                   |
| 84262989     | Application  |               | 7/2/2015    |            | PCT/US2015/039128  | PCT | DIGITAL VOLTAGE SAMPLING                                                                                            |
| 84262997     | Application  |               | 6/26/2015   |            | PCT/US2015/037958  | PCT | DETERMINING AN ALTERNATING CURRENT (AC) CHARACTERISTIC FROM A WAVEFORM                                              |
| 84263012     | Application  |               | 42202       |            | PCT/US2015/040880  | PCT | CURRENT RESTRICTION                                                                                                 |
| 84263021     | Application  |               | 8/24/2015   |            | PCT/US2015/046614  | PCT | POWER DELIVERY MONITOR AND CONTROL WITH AN UNINTERRUPTIBLE POWER SUPPLY                                             |
| 84263029     | Application  |               | 9/18/2015   |            | PCT/US2015/051006  | PCT | Printed Circuit Board                                                                                               |
| 84263038     | Application  |               | 42229       |            | PCT/US2015/045085  | PCT | DEVICE OPERATING STATE MODIFICATION WITH UNINTERRUPTIBLE POWER SOURCE                                               |
| 84263052     | Application  |               | 6/19/2015   |            | PCT/US2015/036665  | PCT | FIRST SOCKET NESTED IN A SECOND SOCKET                                                                              |
| 84263060     | Acknowledged |               |             |            |                    | PCT | FAN CONNECTOR HOUSING                                                                                               |
| 84263098     | Application  |               | 7/31/2015   |            | PCT/US2015/043268  | PCT | Discovering and Publishing API Information                                                                          |
| 84263106     | Application  |               | 8/5/2015    |            | PCT/US2015/043716  | PCT | VERIFICATION OF A DEVICE IDENTIFIER OF A MOBILE DEVICE                                                              |
| 84263598     | Application  |               | 7/31/2015   |            | PCT/US2015/043185  | PCT | Cloud Provisioning for Networks                                                                                     |
| 84263602     | Application  |               | 7/10/2015   |            | PCT/US2015/039982  | PCT | HYBRID CLOUD MANAGEMENT                                                                                             |
| 84263678     | To Be Filed  |               |             |            |                    | PCT | A Method to Support Baby Giant Frames in SDN Networks                                                               |
| 84264042     | Application  |               | 5/29/2015   |            | PCT/US2015/033124  | PCT | DETERMINING ACTIONS TO BE IMMEDIATELY PERFORMED ON A NETWORK PACKET WITH AN APPLICATION SPECIFIC INTEGRATED CIRCUIT |
| 84264054     | Application  |               | 6/12/2015   |            | PCT/US2015/035509  | PCT | APPLICATION IDENTIFICATION CACHE                                                                                    |
| 84264062     | Application  |               | 7/31/2015   |            | PCT/US2015/043242  | PCT | Data Copy to Non-Volatile Memory                                                                                    |
| 84264099     | Application  |               | 7/17/2015   |            | PCT/US2015/040941  | PCT | GENERATING A HASH TABLE IN ACCORDANCE WITH A PREFIX LENGTH                                                          |
| 84264103     | Application  |               | 7/28/2015   |            | PCT/US2015/042447  | PCT | HASH VALIDATION KEY                                                                                                 |
| 84264111     | Application  |               | 9/4/2015    |            | PCT/US2015/048567  | PCT | DATA TABLES IN CONTENT ADDRESSABLE MEMORY                                                                           |
| 84264123     | To Be Filed  |               |             |            |                    | PCT | OPEN SHORTEST PATH FIRST ROUTING FOR HYBRID NETWORKS                                                                |
| 84264131     | To Be Filed  |               |             |            |                    | PCT | DYNAMIC ALLOCATION OF RESOURCES WITHIN NETWORK DEVICES                                                              |
| 84264139     | Application  |               | 7/22/2015   |            | PCT/US2015/041546  | PCT | PROVIDING A COMPOSITE NETWORK POLICY                                                                                |
| 84264143     | To Be Filed  |               |             |            |                    | PCT | Real-time Verification of High Level Policies in SDN Networks                                                       |
| 84264600     | Instructed   |               |             |            |                    | PCT | Memristor sensing circuits utilizing reference cells for improved performance                                       |
| 84264626     | Application  |               | 42184       |            | PCT/US2015/038258  | PCT | FAILURE OF NETWORK DEVICES IN CLOUD MANAGED NETWORKS                                                                |

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|--------------|--------------|---------------|-------------|------------|--------------------|-----|-------------------------------------------------------------------------------------------------------------------------|
| 84264657     | Application  |               | 6/18/2015   |            | PCT/US2015/036344  | PCT | CLIENT COMMUNICATIONS IN MULTI-TENANT DATA CENTER NETWORKS                                                              |
| 84264661     | Application  |               | 8/17/2015   |            | PCT/US2015/045490  | PCT | LOADING CUSTOM CODE INTO BINARY CODE                                                                                    |
| 84264767     | Application  |               | 9/19/2015   |            | PCT/US2015/051109  | PCT | DETERMINING OUTPUT PRESENTATION TYPE                                                                                    |
| 84264807     | To Be Filed  |               |             |            |                    | PCT | BACKUP CHANGES IN TRANSACTION LOG FILE                                                                                  |
| 84264829     | Application  |               | 6/5/2015    |            | PCT/US2015/034433  | PCT | CROSSBAR ARRAYS WITH OPTICAL SELECTORS                                                                                  |
| 84264843     | Application  |               | 7/29/2015   |            | PCT/US2015/042723  | PCT | NON-VOLATILE RESISTANCE MEMORY DEVICES INCLUDING A VOLATILE SELECTOR WITH COPPER AND TANTALUM OXIDE                     |
| 84264952     | Application  |               | 42216       |            | PCT/EP2015/067690  | PCT | COMMIT BASED MEMORY OPERATION IN A MEMORY SYSTEM                                                                        |
| 84264956     | Application  |               | 42216       |            | PCT/EP2015/067683  | PCT | METHODS TO CREATE LOGICAL TREES OF MEMORY SYSTEMS                                                                       |
| 84265090     | Application  |               | 7/29/2015   |            | PCT/US2015/042617  | PCT | CONTEXT ORIENTED TRANSLATION                                                                                            |
| 84265118     | Application  |               | 42222       |            | PCT/US2015/043948  | PCT | APPLICATION COMPONENT WARNINGS BASED UPON PERFORMANCE RATINGS                                                           |
| 84265135     | Application  |               | 42258       |            | PCT/US2015/049833  | PCT | HUMAN-READABLE CLOUD STRUCTURES                                                                                         |
| 84265156     | Application  |               | 5/31/2015   |            | PCT/US2015/033441  | PCT | TESTING APPLICATIONS USING VIRTUAL REALITY                                                                              |
| 84265201     | Application  |               | 8/31/2015   |            | PCT/US2015/047722  | PCT | NON-VOLATILE RESISTANCE MEMORY DEVICES INCLUDING A VOLATILE SELECTOR WITH AN ALLOY ELECTRODE AND SILICON DIOXIDE MATRIX |
| 84265205     | Application  |               | 6/25/2015   |            | PCT/US2015/037604  | PCT | MEMORY CELLS WITH VOLATILE CONDUCTING BRIDGE SELECTORS                                                                  |
| 84265213     | Application  |               | 8/7/2015    |            | PCT/US2015/044251  | PCT | NETWORK TRUSTED SERVICE MANAGER                                                                                         |
| 84265219     | Application  |               | 42181       |            | PCT/US2015/037978  | PCT | AUTHENTICATION REQUESTS                                                                                                 |
| 84265227     | Instructed   |               |             |            |                    | PCT | Rolling Upgrades : Continuous-X in Network Functions Virtualization (NFV) Environments                                  |
| 84265608     | Acknowledged |               |             |            |                    | PCT | A distributed, polymorphic type system exploiting subtyping to provide type evolution over long-lived data.             |
| 84265628     | Application  |               | 42271       |            | PCT/EP2015/072043  | PCT | RESILIENT MEMORY FABRIC                                                                                                 |
| 84265657     | Application  |               | 42216       |            | PCT/EP2015/067660  | PCT | MALWARE MODELLING                                                                                                       |
| 84265665     | Application  |               | 7/31/2015   |            | PCT/EP2015/067659  | PCT | Hardware-based Method of Live Migration in a Multi-node System                                                          |
| 84265685     | Application  |               | 7/30/2015   |            | PCT/EP2015/067603  | PCT | MEMORY ACCESS CONTROL METHOD AND SYSTEM                                                                                 |
| 84266186     | Application  |               | 7/21/2015   |            | PCT/US2015/041352  | PCT | USING A SINGLE CACHE TABLE                                                                                              |
| 84266350     | Acknowledged |               |             |            |                    | PCT | Methods of Securing Important Information on a SPI Flash ROM Device                                                     |
| 84266361     | Application  |               | 8/7/2015    |            | PCT/US2015/044293  | PCT | AIRLINE RESOURCE MANAGEMENT                                                                                             |
| 84269175     | Application  |               | 7/21/2015   |            | PCT/US2015/041217  | PCT | TRANSLATE DATA OPERATIONS BASED ON DATA STRIPE SIZE                                                                     |

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| 84269696     | Application  |               | 6/24/2015   |            | PCT/US2015/037428  | PCT | CONTROL AERIAL MOVEMENT OF DRONE BASED ON LINE OF SIGHT OF HUMANS USING DEVICES                                                            |
| 84271041     | Acknowledged |               |             |            |                    | PCT | ESD-Absorbing RRAM                                                                                                                         |
| 84277710     | To Be Filed  |               |             |            |                    | PCT | APPLICATION DEPLOYMENT TO VIRTUAL MACHINES                                                                                                 |
| 84279648     | Application  |               | 42173       |            | PCT/US2015/036340  | PCT | NETWORK BASED SERVICE DISCOVERY VIA UNICAST MESSAGES                                                                                       |
| 84282368     | Application  |               | 42178       |            | PCT/US2015/037228  | PCT | Storage Reclamation in a Thin Provisioned Storage Device                                                                                   |
| 84285364     | Application  |               | 7/30/2015   |            | PCT/US2015/042829  | PCT | PROVIDING A PROBABILITY FOR A CUSTOMER INTERACTION                                                                                         |
| 84285388     | Application  |               | 7/30/2015   |            | PCT/US2015/042831  | PCT | STORING DATA IN A DEDUPLICATION STORE                                                                                                      |
| 84289636     | Application  |               | 6/24/2015   |            | PCT/US2015/037430  | PCT | Reducing flooding of route updates of a dynamic routing protocol                                                                           |
| 84298166     | Application  |               | 6/29/2015   |            | PCT/US2015/038357  | PCT | Determining a Sampling Rate for Data Traffic                                                                                               |
| 84303080     | Application  |               | 42214       |            | PCT/US2015/042690  | PCT | JOB SCHEDULING IN AN INFINIBAND NETWORK BASED HPC CLUSTER                                                                                  |
| 84312440     | Application  |               | 7/17/2015   |            | PCT/US2015/040946  | PCT | CONFLICT DETECTION IN A HYBRID NETWORK DEVICE                                                                                              |
| 90015754     | Application  |               | 8/7/2015    |            | PCT/US2015/044193  | PCT | ANNOTATED QUERY GENERATOR                                                                                                                  |
| 90022703     | Application  |               | 8/7/2015    |            | PCT/US2015/044311  | PCT | Generating Test Data Based on Histogram Statistics                                                                                         |
| 90027143     | To Be Filed  |               |             |            |                    | PCT | Object level dynamic implementation of concurrency control methods using machine learning algorithms running on big data                   |
| 90031053     | Application  |               | 42276       |            | PCT/US2015/052869  | PCT | MOUNTING EXTENSION BARS ON POWER DISTRIBUTION UNITS                                                                                        |
| 90031070     | To Be Filed  |               |             |            |                    | PCT | POWER CORD RETENTION ASSEMBLY                                                                                                              |
| 90031074     | To Be Filed  |               |             |            |                    | PCT | Compact Blade Latch with Security Feature and Insertion Tool                                                                               |
| 90032041     | To Be Filed  |               |             |            |                    | PCT | Determining the strength of links between threat objects and its influence on scoring                                                      |
| 90033928     | To Be Filed  |               |             |            |                    | PCT | Automated Real-time Discovery of Liquid Cooling Connections for Data Center Systems                                                        |
| 90034013     | To Be Filed  |               |             |            |                    | PCT | DEVICE MOUNTS                                                                                                                              |
| 90034148     | Acknowledged |               |             |            |                    | PCT | On the use of Bayesian Inference for Estimating the Characteristics of Processing Systems for the Purpose of Splitting Uncertain Workflows |
| 90034156     | Acknowledged |               |             |            |                    | PCT | Failure Atomic Sections on The Machine via JUSTDO Logging                                                                                  |
| 90034168     | Application  |               | 8/28/2015   |            | PCT/US2015/047384  | PCT | Managing Manifests for Replication                                                                                                         |
| 90034176     | Application  |               | 8/28/2015   |            | PCT/US2015/047391  | PCT | Collision Handling During an Asynchronous Replication                                                                                      |
| 90035084     | Acknowledged |               |             |            |                    | PCT | Silent Shredder: Zero-Cost Zeroing NVMM Controller                                                                                         |
| 90035093     | Acknowledged |               |             |            |                    | PCT | Auto throttling to manage power consumption and cooling                                                                                    |

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| 90035101     | Acknowledged |               |             |            |                    | PCT | Auto entry and exit from power down states                                                                                                       |
| 90035106     | Acknowledged |               |             |            |                    | PCT | A Flat Scalable Switch Fabric Architecture for Blade Enclosures                                                                                  |
| 90035110     | Acknowledged |               |             |            |                    | PCT | Auto management of paging mode                                                                                                                   |
| 90035118     | Acknowledged |               |             |            |                    | PCT | Active server backplane that allows different I/O protocols                                                                                      |
| 90035126     | Acknowledged |               |             |            |                    | PCT | OSFP+ Dual 10GBASE-T Transceiver                                                                                                                 |
| 90035130     | Acknowledged |               |             |            |                    | PCT | Bus retime and expansion                                                                                                                         |
| 90035138     | To Be Filed  |               |             |            |                    | PCT | Tool to generate Infrastructure Templates                                                                                                        |
| 90035167     | Acknowledged |               |             |            |                    | PCT | Feedback-integrated Mechanism for Improved Topics Extraction from Application-derived Textual Documents                                          |
| 90035175     | To Be Filed  |               |             |            |                    | PCT | Target orchestrated in-band diagnostic data collection and management in a storage area network                                                  |
| 90035187     | To Be Filed  |               |             |            |                    | PCT | Provisioning of BYOD for guests, integrated with the Calendar Application                                                                        |
| 90035195     | Acknowledged |               |             |            |                    | PCT | Self Generating Graph Models in Web Analytics                                                                                                    |
| 90035207     | Acknowledged |               |             |            |                    | PCT | Automated Real-time Fault Tree Discovery and Status Reporting for Data Center Systems                                                            |
| 90035212     | Acknowledged |               |             |            |                    | PCT | Sensor Network for Multi-Location & Pattern Leakage Detection                                                                                    |
| 90035221     | Acknowledged |               |             |            |                    | PCT | A Novel Inverterless UPS Solution for HDVC 240V Input in a Server Application                                                                    |
| 90035233     | To Be Filed  |               |             |            |                    | PCT | Using Virtualized Environment with Shared Non-Volatile Memory Integrated with Memory Performance Emulator for Evaluating Application Performance |
| 90035241     | Application  |               | 42258       |            | PCT/US2015/049726  | PCT | SWITCH PROCESS VIRTUAL ADDRESS SPACE                                                                                                             |
| 90035253     | To Be Filed  |               |             |            |                    | PCT | Accelerated Client Server Programming Models Using Address Space Switching                                                                       |
| 90035272     | To Be Filed  |               |             |            |                    | PCT | Zookeeper based Property Service for Dynamic Management of Java Application Properties.                                                          |
| 90035276     | Acknowledged |               |             |            |                    | PCT | Field-Programmable CMOS Driver for Mach-Zehnder Modulator -- UHU                                                                                 |
| 90035284     | Acknowledged |               |             |            |                    | PCT | Direct install, tool-less removable blade shelf for a blade enclosure                                                                            |
| 90035292     | Acknowledged |               |             |            |                    | PCT | LPOT (locally-powered optical transceiver) module                                                                                                |
| 90035301     | Acknowledged |               |             |            |                    | PCT | Castle - Modularly configurable EM switch system                                                                                                 |
| 90035324     | Acknowledged |               |             |            |                    | PCT | A System and method to introduce or modify a sequential or declarative orchestration steps dynamically                                           |
| 90035335     | Application  |               | 42272       |            | PCT/US2015/052285  | PCT | Defect Assessment                                                                                                                                |

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| 90035339     | Acknowledged |               |             |            |                    | PCT | This invention is a hardware appliance to support the processing of Airline Retailing for travelers. Airline Retailing is composed of seat availability processing, shopping, merchandizing and internet booking. |
| 90035347     | Acknowledged |               |             |            |                    | PCT | System and method to implement a hot-warm-cold data temperature driven storage management lifecycle for content objects in cloud based infrastructure                                                             |
| 90035355     | Acknowledged |               |             |            |                    | PCT | A History-Based Algorithm for Predicting Work Item Handling Time                                                                                                                                                  |
| 90035367     | To Be Filed  |               |             |            |                    | PCT | Security Vulnerability machine transformation & Analyzer as a Service to enable assess vulnerabilities                                                                                                            |
| 90036930     | To Be Filed  |               |             |            |                    | PCT | Optimized and efficient volume placement and monitoring utilizing 3PAR performance metrics and Federation                                                                                                         |
| 90036938     | Acknowledged |               |             |            |                    | PCT | Elastic User Interface Framework - Part of Fluid.IT (nee Tandem) project                                                                                                                                          |
| 90036942     | Acknowledged |               |             |            |                    | PCT | Multiplayer pattern matching                                                                                                                                                                                      |
| 90036950     | Acknowledged |               |             |            |                    | PCT | Efficient mapping of compute requirements to new hosts - reversing greedy solution to high dimensional identical knapsack problems                                                                                |
| 90036964     | To Be Filed  |               |             |            |                    | PCT | One LCD Security Bezel can work in 2 different orientations                                                                                                                                                       |
| 90037019     | Acknowledged |               |             |            |                    | PCT | Analog Present Identifier                                                                                                                                                                                         |
| 90037039     | Application  |               | 42258       |            | PCT/US2015/049572  | PCT | SECURING DATA WITH MEMRISTORS                                                                                                                                                                                     |
| 90037048     | To Be Filed  |               |             |            |                    | PCT | Flow Control Pass-Through for TippingPoint IPS products can improve a customers' network-level congestion experience.                                                                                             |
| 90037056     | To Be Filed  |               |             |            |                    | PCT | Dual path PCB layout concept for High Speed I/O signals (PCIe, SAS, UPI etc ) enables two servers with different I/O CFG requirements to share common PCB design.                                                 |
| 90037062     | To Be Filed  |               |             |            |                    | PCT | Custom Communication - a technology that allows the end user, and context, to determine the optimal communication technology to use based on preference, needs , availability , and corporate policy.             |
| 90037070     | To Be Filed  |               |             |            |                    | PCT | Mechanisms for recovering content from cryptographically secured non-volatile memory                                                                                                                              |
| 90037082     | Application  |               | 42264       |            | PCT/US2015/050632  | PCT | EFFICIENTLY STORING INITIALIZATION VECTORS                                                                                                                                                                        |
| 90037090     | To Be Filed  |               |             |            |                    | PCT | A system to prevent disclosure of automatically generated passwords via instant messaging systems.                                                                                                                |
| 90037102     | Acknowledged |               |             |            |                    | PCT | Method for efficiently generating a random graph with a given degree distribution                                                                                                                                 |
| 90037110     | Application  |               | 42265       |            | PCT/US2015/050937  | PCT | AUTOMATIC QUERY                                                                                                                                                                                                   |

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| 90037122     | To Be Filed  |               |             |            |                    | PCT | Incremental k-Nearest Neighbor Graph Construction on Streaming Data via Orthogonal Transform based Indexing                                                                                             |
| 90037253     | Acknowledged |               |             |            |                    | PCT | Multiple Simultaneous Value Objects                                                                                                                                                                     |
| 90037257     | Acknowledged |               |             |            |                    | PCT | Lock-Free Scalable Shared Cuckoo Maps                                                                                                                                                                   |
| 90037265     | To Be Filed  |               |             |            |                    | PCT | Scalable Fault-Tolerant Multiprocess Garbage Collection for Unmanaged Languages                                                                                                                         |
| 90037274     | To Be Filed  |               |             |            |                    | PCT | Inbound Pointer Management for Multiprocess Garbage Collection                                                                                                                                          |
| 90037282     | To Be Filed  |               |             |            |                    | PCT | Hash-Based Clustering                                                                                                                                                                                   |
| 90037290     | Application  |               | 42270       |            | PCT/US2015/051746  | PCT | GRAPH DATABASE QUERY CLASSIFICATION                                                                                                                                                                     |
| 90037294     | Application  |               | 42251       |            | PCT/US2015/048502  | PCT | CLASSIFIER                                                                                                                                                                                              |
| 90037319     | To Be Filed  |               |             |            |                    | PCT | Recovery from data corruption in clustered storage systems                                                                                                                                              |
| 90037348     | Application  |               | 42265       |            | PCT/US2015/050867  | PCT | DATA REPLICATION MANAGEMENT                                                                                                                                                                             |
| 90037360     | To Be Filed  |               |             |            |                    | PCT | PIP-OBI Deduplication of meta data                                                                                                                                                                      |
| 90037377     | To Be Filed  |               |             |            |                    | PCT | Smart SAN end to end fabric configuration using custom TLV LLDP protocol packets                                                                                                                        |
| 90037388     | Application  |               | 42270       |            | PCT/US2015/051623  | PCT | SELECTING AND LOADING FIRMWARE VOLUMES                                                                                                                                                                  |
| 90037396     | To Be Filed  |               |             |            |                    | PCT | Switch Firmware Upgrade using Behavior Feedback Information                                                                                                                                             |
| 90037419     | To Be Filed  |               |             |            |                    | PCT | Method to match variable length strings longer than hardware DPI engine with applications to SDN pipelines                                                                                              |
| 90037423     | To Be Filed  |               |             |            |                    | PCT | A Joint MU-MIMO Client Selection and Rate Adaptation Design for Wireless Networks Using Limited Feedback                                                                                                |
| 90037431     | To Be Filed  |               |             |            |                    | PCT | High Availability PCIe Serial Hot-Plug Controller addresses the need for PCIe FRU replacement in Highly Available Systems.                                                                              |
| 90037439     | To Be Filed  |               |             |            |                    | PCT | Carbon-free data center using fuel cells and liquid-cooled IT                                                                                                                                           |
| 90037445     | To Be Filed  |               |             |            |                    | PCT | Mixing 2 phase commit protocols for distributed transactions where a subset of participants implement the presumed prepared protocol                                                                    |
| 90037694     | To Be Filed  |               |             |            |                    | PCT | A digitally auto-tuning control strategy is proposed to improve transient response for minimum overshoot and undershoot of output voltage in dc-dc power converter for server system power application. |
| 90037751     | Application  |               | 42234       |            | PCT/US2015/045756  | PCT | IDENTIFYING RANDOMLY GENERATED CHARACTER STRINGS                                                                                                                                                        |

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| 90037755     | Acknowledged |               |             |            |                    | PCT | This innovation builds upon IT asset management and Data analytics to create industry-wide peer groups to aid in procurement for IT customers. It helps verify, vet and produce IT solutions and shortens procurement cycles in the process. |
| 90037760     | To Be Filed  |               |             |            |                    | PCT | Using non-volatile memory aware threads to make multi-threaded applications durable.                                                                                                                                                         |
| 90037783     | Application  |               | 9/18/2015   |            | PCT/US2015/051062  | PCT | MULTI-LEVEL SENSING CIRCUITS FOR CROSSBAR MEMORY ARRAYS                                                                                                                                                                                      |
| 90037791     | To Be Filed  |               |             |            |                    | PCT | Thermal Aware Scheduling                                                                                                                                                                                                                     |
| 90037795     | To Be Filed  |               |             |            |                    | PCT | Volatile resistive based RAM device architecture for neuromorphic computing hardware application                                                                                                                                             |
| 90037806     | To Be Filed  |               |             |            |                    | PCT | Method for Using Capacitance to Detect Penetration Attacks                                                                                                                                                                                   |
| 90037815     | To Be Filed  |               |             |            |                    | PCT | SNTQ product Privacy Risks Management Methodology                                                                                                                                                                                            |
| 90037823     | To Be Filed  |               |             |            |                    | PCT | A personalized evolving system for handling the confirmation process before performing risky operations                                                                                                                                      |
| 90037843     | To Be Filed  |               |             |            |                    | PCT | Fully Functional Wireless Interface for Windows Guest Domain in Xen Hypervisor using Paravirtual Wireless frontend and backend drivers.                                                                                                      |
| 90037855     | Application  |               | 4/22/15     |            | PCT/US2015/052650  | PCT | THREAT SCORE DETERMINATION                                                                                                                                                                                                                   |
| 90037863     | To Be Filed  |               |             |            |                    | PCT | Dynamic Typing of User Defined Transformation Function                                                                                                                                                                                       |
| 90037875     | To Be Filed  |               |             |            |                    | PCT | Using Eye Tracking to estimate the coverage of the manual testing                                                                                                                                                                            |
| 90037894     | To Be Filed  |               |             |            |                    | PCT | Liquid Work auto-balances and reschedules blocks of time based on the changing need/availability of people's schedules and other constraints to ensure that employees have time to get their JOB done (and not be stuck in meetings)         |
| 90037926     | To Be Filed  |               |             |            |                    | PCT | High Availability Sample Store System provides non-blocking access to analog conversion data to redundant hosts.                                                                                                                             |
| 90037938     | To Be Filed  |               |             |            |                    | PCT | PANDA (power, air & network distribution adapter) bay and system for optical transceivers                                                                                                                                                    |
| 90037960     | To Be Filed  |               |             |            |                    | PCT | Input/output memory management unit (IOMMU) non-volatile memory (NVM) aware for cache policy management.                                                                                                                                     |
| 90037964     | To Be Filed  |               |             |            |                    | PCT | Methods to Prevent a Mismatched Connection Between Different High Speed I/O Fabrics on an Active Backplane That Supports Multiple I/O Fabrics                                                                                                |

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| 90037972     | To Be Filed  |               |             |            |                    | PCT | Method to detect terminated data flows in link aggregation as soon as the last TCP data packet is transmitted. Early detection of terminated data flows ensures that no stale entries are ever present in the flow database. |
| 90037984     | To Be Filed  |               |             |            |                    | PCT | Opportunistic write back                                                                                                                                                                                                     |
| 90037992     | To Be Filed  |               |             |            |                    | PCT | System and method for Stateless Volumisation of OS Images and peripheral drivers.                                                                                                                                            |
| 90039506     | Acknowledged |               |             |            |                    | PCT | Automatic fast mesh network formation                                                                                                                                                                                        |
| 90039518     | To Be Filed  |               |             |            |                    | PCT | A method for applying link analysis over an application case graph, combined with runtime performance metrics, for ranking the impact of a code change.                                                                      |
| 90039589     | To Be Filed  |               |             |            |                    | PCT | Method of prioritizing voice and video traffic based on radio resource / WMM queue utilization                                                                                                                               |
| 90039601     | To Be Filed  |               |             |            |                    | PCT | A Consistency checker mechanism for SDN devices to detect inconsistency between devices flow state and a controller database in a Software-Defined Network (SDN) environment                                                 |
| 90039609     | Acknowledged |               |             |            |                    | PCT | Pulsar: Improving Throughput Estimation in Enterprise LTE Small Cells                                                                                                                                                        |
| 90039621     | To Be Filed  |               |             |            |                    | PCT | Flexible Orthogonal Policy Recombination and Translation                                                                                                                                                                     |
| 90039643     | Application  |               | 42275       |            | PCT/US2015/052561  | PCT | LATENCY TRACKING METADATA FOR A NETWORK SWITCH DATA PACKET                                                                                                                                                                   |
| 90039647     | To Be Filed  |               |             |            |                    | PCT | Two-Stage Code Generation for Single Table Network Devices                                                                                                                                                                   |
| 90040234     | Application  |               | 42247       |            | PCT/US2015/047696  | PCT | DOMAIN CLASSIFICATION                                                                                                                                                                                                        |
| 90045815     | Application  |               | 42244       |            | PCT/US2015/047351  | PCT | MANAGING A DATABASE INDEX FILE                                                                                                                                                                                               |
| 90045824     | Application  |               | 42247       |            | PCT/US2015/047662  | PCT | MERGING INCOMING DATA IN A DATABASE                                                                                                                                                                                          |
| 90050947     | Application  |               | 42271       |            | PCT/US2015/051986  | PCT | PROCESS AND THREAD LAUNCH FEATURES                                                                                                                                                                                           |
| 90050951     | Application  |               | 42275       |            | PCT/US2015/052741  | PCT | EXECUTING TRANSACTIONS BASED ON SUCCESS OR FAILURE OF THE TRANSACTIONS                                                                                                                                                       |
| 90056999     | Acknowledged |               |             |            |                    | PCT | Task-Based Conflict Resolution                                                                                                                                                                                               |
| 90060809     | Application  |               | 42269       |            | PCT/US2015/051390  | PCT | MANAGING APPENDABLE STATE OF AN IMMUTABLE FILE                                                                                                                                                                               |
| 90060849     | Application  |               | 42268       |            | PCT/US2015/051119  | PCT | IDENTIFICATION OF A DNS PACKET AS MALICIOUS BASED ON A VALUE                                                                                                                                                                 |
| 90066001     | Instructed   |               |             |            |                    | PCT | Optical connector incorporating single piece sealing gasket and compression spring.                                                                                                                                          |
| 90068057     | Acknowledged |               |             |            |                    | PCT | A method for tracking of quality and development based on model-less representations (environments, versions, activities ...)                                                                                                |

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| 90068077     | Acknowledged |               |             |            |                    | PCT | Badge and Performance Tracking for Security Information Sharing Platforms                                                                                                          |
| 90068085     | Acknowledged |               |             |            |                    | PCT | Threat Sharing Market Place Verification and Privacy                                                                                                                               |
| 90068294     | Instructed   |               |             |            |                    | PCT | Contamination resistant optical fiber connector for mid-board optics.                                                                                                              |
| 90068520     | Instructed   |               |             |            |                    | PCT | Novel transconductance boosting for transimpedance amplifier bandwidth extension                                                                                                   |
| 90068574     | Instructed   |               |             |            |                    | PCT | Sharing Data between a Relational Database System and Graph Engine                                                                                                                 |
| 90068578     | Instructed   |               |             |            |                    | PCT | Malware Detection in Web-Proxy Logs Using Interactive Analytics                                                                                                                    |
| 90068823     | Instructed   |               |             |            |                    | PCT | MU-MIMO-Aware Access Point Selection for Wireless Networks                                                                                                                         |
| 83854599     | Application  |               | 41/23       |            | PCT/US2014/031695  | PCT | TRUSTED CONTROLLER-AGENT COMMUNICATION                                                                                                                                             |
| 83954327     | Application  |               | 10/30/2014  |            | PCT/US2014/063195  | PCT | AUTOMATIC RE-ROUTING OF NETWORK TRAFFIC IN A SOFTWARE-DEFINED NETWORK                                                                                                              |
| 83983149     | Application  |               | 8/25/2014   |            | PCT/US2014/052534  | PCT | SELECTING AN OPTIMAL NETWORK DEVICE FOR REPORTING FLOW TABLE MISSES UPON EXPIRY OF A FLOW IN A SOFTWARE DEFINED NETWORK                                                            |
| 84111839     | Application  |               | 6/3/2015    |            | PCT/US2015/033897  | PCT | ADDRESS CACHE FOR TUNNEL ENDPOINT ASSOCIATED WITH AN OVERLAY NETWORK                                                                                                               |
| 84111899     | Application  |               | 4/3/2015    |            | PCT/US2015/024294  | PCT | TAP TECHNOLOGY SELECTION                                                                                                                                                           |
| 84264127     | Application  |               | 42185       |            | PCT/US2015/038418  | PCT | ACTION REFERENCES                                                                                                                                                                  |
| 84265836     | Application  |               | 42209       |            | PCT/US2015/041980  | PCT | SIMULTANEOUS PROCESSING OF FLOW TABLES                                                                                                                                             |
| 90037035     | Application  |               | 9/30/2015   |            | PCT/US2015/053100  | PCT | IDENTIFICATION OF AN SDN ACTION PATH BASED ON A MEASURED FLOW RATE                                                                                                                 |
| 90039514     | Acknowledged |               |             |            |                    | PCT | Software Define Network (SDN) module to infer the VLAN ID for a given node based on data collected by an Intrusion Prevention System (IPS) and SDN Controller topology information |
| 90039534     | Application  |               | 42269       |            | PCT/US2015/051379  | PCT | ENCRYPTED DATA PACKET                                                                                                                                                              |
| 84031347     | Application  |               | 41955       |            | PCT/US2014/065193  | PCT | DATA WRITE BACK                                                                                                                                                                    |
| 84031424     | Application  |               | 41943       |            | PCT/US2014/063401  | PCT | LOAD DISCOVERY                                                                                                                                                                     |
| 84031447     | Application  |               | 41955       |            | PCT/US2014/065235  | PCT | DATA BACKUP                                                                                                                                                                        |
| 84115065     | Application  |               | 5/15/2015   |            | PCT/US2015/031250  | PCT | ENABLING A LOW OUTPUT VOLTAGE TO LOADS                                                                                                                                             |
| 84173024     | Application  |               | 4/16/2015   |            | PCT/US2015/026233  | PCT | Power Outlet Strips                                                                                                                                                                |
| 84262842     | Application  |               | 6/29/2015   |            | PCT/US2015/038323  | PCT | BACKUP POWER SUPPLY CONTROLLERS                                                                                                                                                    |
| 84262859     | Application  |               | 7/7/2015    |            | PCT/US2015/039348  | PCT | PHASE SHEDDING                                                                                                                                                                     |
| 84262925     | Application  |               | 7/2/2015    |            | PCT/US2015/038992  | PCT | Configuring a Voltage Regulator                                                                                                                                                    |

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| 90030669     | To Be Filed  |               |             |            |                    | PCT | Smart Array Controller that uses Type IV NVDIMM technology such as memristor for caching memory                                                                           |
| 90035229     | Acknowledged |               |             |            |                    | PCT | A Novel Distribution Module System to Facilitate both Direct and Indirect AC power in a Distributed Energy System; When a DES Module is used as an Independent Power Unit |
| 90055163     | Application  |               | 42258       |            | PCT/US2015/049764  | PCT | AVERAGING MODULES                                                                                                                                                         |
| 84031407     | Application  |               | 41943       |            | PCT/US2014/063542  | PCT | SERVER DEVICE WITH CAPACITIVE CIRCUIT                                                                                                                                     |
| 90037699     | To Be Filed  |               |             |            |                    | PCT | Real-time chemistry monitoring and provisioning for data center facilities                                                                                                |
| 84266652     | Application  |               | 7/22/2015   |            | PCT/US2015/041589  | PCT | MONITORING A SENSOR ARRAY                                                                                                                                                 |
| 83269156     | Published    |               | 7/26/2013   |            | PCT/US2013/052240  | PCT | FIRST DATA IN RESPONSE TO SECOND READ REQUEST                                                                                                                             |
| 83272485     | Published    |               | 7/30/2013   |            | PCT/US2013/052671  | PCT | Recovering Stranded Data                                                                                                                                                  |
| 83602769     | Published    |               | 9/27/2013   |            | PCT/US2013/062396  | PCT | MEMORY SPARING ON MEMORY MODULES                                                                                                                                          |
| 83749106     | Published    |               | 1/29/2014   |            | PCT/US2014/013491  | PCT | MEMORY MODULE CONNECTOR                                                                                                                                                   |
| 83820075     | Application  |               | 4/29/2014   |            | PCT/US2014/035810  | PCT | SWITCHES COUPLING VOLATILE MEMORY DEVICES TO A POWER SOURCE                                                                                                               |
| 84029904     | Application  |               | 11/4/2014   |            | PCT/US2014/063842  | PCT | MEMORY ARRAY DRIVER                                                                                                                                                       |
| 84030989     | Application  |               | 11/25/2014  |            | PCT/US2014/067274  | PCT | MEMORY CONTROLLER WITH MEMORY RESOURCE MEMORY MANAGEMENT                                                                                                                  |
| 84031261     | Application  |               | 41943       |            | PCT/US2014/063332  | PCT | SYSTEMS AND METHODS FOR RESTRICTING WRITE ACCESS TO NON-VOLATILE MEMORY                                                                                                   |
| 84033113     | Application  |               | 41935       |            | PCT/US2014/061919  | PCT | DETERMINING A CHIP SELECT FROM PHYSICAL RANK INFORMATION                                                                                                                  |
| 84114026     | Application  |               | 2/6/2015    |            | PCT/US2015/014794  | PCT | REFRESHING AN IDENTIFIED PARTIAL ARRAY                                                                                                                                    |
| 84172958     | Application  |               | 4/30/2015   |            | PCT/US2015/028610  | PCT | MEMORY MODULE ERROR TRACKING                                                                                                                                              |
| 84260054     | Application  |               | 42213       |            | PCT/US2015/042500  | PCT | Hardware Flush Assist                                                                                                                                                     |
| 84262447     | Application  |               | 6/26/2015   |            | PCT/US2015/038176  | PCT | CIRCUITS TO PERFORM LOW-HEADROOM RRAM OPERATIONS                                                                                                                          |
| 83209050     | Published    |               | 5/20/2013   |            | PCT/US2013/041876  | PCT | Monitoring Resources in A Partnership Program                                                                                                                             |
| 83820258     | Application  |               | 3/27/2015   |            | PCT/US2015/022951  | PCT | METHOD AND SYSTEM FOR INVENTORY AVAILABILITY PREDICTION                                                                                                                   |
| 83822242     | Application  |               | 4/30/2014   |            | PCT/IN2014/000290  | PCT | CORRELATION BASED INSTRUMENTS DISCOVERY                                                                                                                                   |
| 83953654     | Application  |               | 10/29/2014  |            | PCT/US2014/062860  | PCT | DETECTION OF POTENTIAL GREY MARKET ACTIVITIES                                                                                                                             |
| 84030737     | Application  |               | 11/3/2014   |            | PCT/IN2014/000707  | PCT | SOCIAL MEDIA ANALYTICS AND RESPONSE                                                                                                                                       |
| 84169111     | Application  |               | 2/20/2015   |            | PCT/US2015/016826  | PCT | SEARCH QUERY MODIFICATION USING PERSONALIZED PROFILE                                                                                                                      |
| 83956193     | Application  |               | 6/27/2014   |            | PCT/US2014/044516  | PCT | RADIO FREQUENCY IDENTIFICATION CAPSULE                                                                                                                                    |
| 83958715     | Application  |               | 6/27/2014   |            | PCT/US2014/044495  | PCT | REPRESENTING A METRIC FOR MARKETING CHANNELS                                                                                                                              |
| 84030906     | Application  |               | 9/29/2014   |            | PCT/US2014/058035  | PCT | SEISMIC BASED FRACKING FLUID DISPOSAL                                                                                                                                     |
| 83200374     | Published    |               | 6/18/2013   |            | PCT/US2013/046273  | PCT | AUTOMATIC TRANSFER SWITCH MODULE                                                                                                                                          |

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| 83217772     | Published   |               | 4/3/2013    |            | PCT/US2013/035166  | PCT | Disabling Counterfeit Cartridges                               |
| 83268721     | Published   |               | 6/25/2013   |            | PCT/US2013/047504  | PCT | FAN MODULE                                                     |
| 83597897     | Published   |               | 12/3/2013   |            | PCT/US2013/072874  | PCT | LIMITING INRUSH OF CURRENT TO A CAPACITOR BASED ON AN INTERVAL |
| 83597940     | Application |               | 2/13/2014   |            | PCT/US2014/016321  | PCT | HANDLE MECHANISM                                               |
| 83702972     | Application |               | 1/6/2014    |            | PCT/US2014/010322  | PCT | MANIFOLDS HAVING SLIDABLE DRIPLESS CONNECTORS                  |
| 83748110     | Application |               | 5/15/2014   |            | PCT/US2014/038168  | PCT | FLUID MANIFOLD                                                 |
| 83828067     | Application |               | 4/28/2014   |            | PCT/US2014/035681  | PCT | POWER SUPPLY CHASSIS INCLUDING A RELEASE LEVER                 |
| 83954842     | Application |               | 7/30/2014   |            | PCT/US2014/048988  | PCT | RETENTION ASSEMBLY                                             |
| 83958838     | Application |               | 9/10/2014   |            | PCT/US2014/055002  | PCT | FOLDABLE MEMORY CARTRIDGE                                      |
| 84033511     | Application |               | 12/16/2014  |            | PCT/US2014/070553  | PCT | LATCHING SYSTEM                                                |
| 84042854     | Application |               | 11/26/2014  |            | PCT/US2014/067617  | PCT | STORAGE DRIVE CARRIER MODULE                                   |
| 84170319     | Application |               | 6/5/2015    |            | PCT/US2015/034586  | PCT | THERMAL MANAGEMENT APPARATUS                                   |
| 84171375     | Application |               | 4/29/2015   |            | PCT/US2015/028277  | PCT | Cable Assembly                                                 |
| 84171438     | Application |               | 4/24/2015   |            | PCT/US2015/027592  | PCT | ADAPTER ASSEMBLIES                                             |
| 84260014     | Application |               | 7/30/2015   |            | PCT/US2015/042971  | PCT | TRANSCIVER MODULES                                             |
| 83272439     | Published   |               | 7/15/2013   |            | PCT/US2013/050502  | PCT | Socket and Adapter                                             |
| 83958008     | Application |               | 7/31/2014   |            | PCT/US2014/049105  | PCT | PROTECTING MEMORY STORAGE CONTENT                              |
| 84032987     | Application |               | 1/14/2015   |            | PCT/US2015/011358  | PCT | Reduced Core Count System Configuration                        |
| 84170402     | Application |               | 4/17/2015   |            | PCT/US2015/026305  | PCT | STORING STATE MACHINE INFORMATION IN A NON-VOLATILE MEMORY     |
| 83597986     | Published   |               | 9/5/2013    |            | PCT/US2013/058216  | PCT | STORAGE ARRAY CONFIRMATION OF USE OF A PATH                    |
| 83629009     | Application |               | 10/31/2013  |            | PCT/US2013/067787  | PCT | TARGET PORT PROCESSING OF A DATA TRANSFER                      |
| 83776291     | Published   |               | 2/24/2014   |            | PCT/US2014/017971  | PCT | SAS ZONE CONFIGURATION MANAGEMENT                              |
| 83825691     | Application |               | 4/23/2014   |            | PCT/US2014/035134  | PCT | DETERMINING CONNECTIVITY INFORMATION FOR A STORAGE DEVICE      |
| 83857264     | Application |               | 3/20/2014   |            | PCT/US2014/031328  | PCT | Storage System Transactions                                    |
| 84031118     | Application |               | 2/2/2015    |            | PCT/US2015/014087  | PCT | UNMAP STORAGE SPACE                                            |
| 84031195     | Application |               | 9/4/2014    |            | PCT/US2014/054110  | PCT | Storage System Bandwidth Determination                         |
| 84033531     | Application |               | 11/4/2014   |            | PCT/US2014/063823  | PCT | DEDUPLICATING DATA ACROSS SUBTENANTS                           |
| 84113047     | Application |               | 4/3/2015    |            | PCT/US2015/024346  | PCT | PERSISTENT MEMORY VERSIONING AND MERGING                       |
| 84124056     | Application |               | 1/5/2015    |            | PCT/US2015/010155  | PCT | Storing excess data in a RAID 60 array                         |
| 84171544     | Application |               | 6/19/2015   |            | PCT/US2015/036591  | PCT | NETWORK COMMUNICATIONS                                         |
| 90034164     | Application |               | 42244       |            | PCT/US2015/047381  | PCT | Managing Sets of Transactions for Replication                  |
| 83272402     | Published   |               | 7/22/2013   |            | PCT/US2013/051501  | PCT | MODULE CONNECTIVITY DEVICE                                     |
| 83691239     | Published   |               | 9/30/2013   |            | PCT/US2013/062576  | PCT | OPTICAL BLIND-MATE CONNECTOR AND ADAPTER                       |
| 83776265     | Published   |               | 1/31/2014   |            | PCT/US2014/014226  | PCT | RETURN PATH CAPACITOR FOR CONNECTED DEVICES                    |
| 84030763     | Application |               | 10/30/2014  |            | PCT/US2014/063174  | PCT | ENCRPTION FOR TRANSACTIONS IN A MEMORY FABRIC                  |

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| 84033073     | Application |               | 10/31/2014  |            | PCT/US2014/063294  | PCT | BLIND-MATING OPTICAL FERRULE ASSEMBLIES                                                          |
| 84259965     | Application |               | 7/28/2015   |            | PCT/US2015/042434  | PCT | MONITORING NETWORK UTILIZATION                                                                   |
| 84259991     | Application |               | 7/30/2015   |            | PCT/US2015/042933  | PCT | COMPONENT SENSING                                                                                |
| 83602809     | Published   |               | 12/20/2013  |            | PCT/CN2013/090077  | PCT | POLICY RULES FOR NETWORK RESOURCE                                                                |
| 90031061     | To Be Filed |               |             |            |                    | PCT | A unique way to identify NIC management port in server system                                    |
| 8319043      | Published   |               | 1/24/2013   |            | PCT/IN2013/000051  | PCT | Address Resolution In Software-Defined Networks                                                  |
| 83629052     | Published   |               | 10/11/2013  |            | PCT/US2013/064671  | PCT | PROVISIONING A NETWORK FOR NETWORK TRAFFIC DURING A SESSION                                      |
| 83766550     | Application |               | 3/31/2014   |            | PCT/US2014/032429  | PCT | CREDIT DISTRIBUTION TO CLIENTS                                                                   |
| 84033611     | Application |               | 41943       |            | PCT/US2014/063289  | PCT | POWER SOURCE ADJUSTMENT                                                                          |
| 84172460     | Application |               | 42117       |            | PCT/US2015/027259  | PCT | NETWORK INFRASTRUCTURE DEVICE TO IMPLEMENT PRE-FILTER RULES                                      |
| 84172706     | Application |               | 3/26/2015   |            | PCT/US2015/022655  | PCT | RING NETWORK UPLINK DESIGNATION                                                                  |
| 84264027     | Application |               | 7/11/2015   |            | PCT/US2015/040934  | PCT | COMBINING PREFIX LENGTHS INTO A HASH TABLE                                                       |
| 84264107     | Application |               | 9/4/2015    |            | PCT/US2015/048555  | PCT | CONTENT ADDRESSABLE MEMORY                                                                       |
| 90035183     | To Be Filed |               |             |            |                    | PCT | Distributed data processing using embedded networking ASIC processors.                           |
| 90039617     | Application |               | 9/25/2015   |            | PCT/US2015/052226  | PCT | PRE-PROCESSING OF DATA PACKETS WITH NETWORK SWITCH APPLICATION-SPECIFIC INTEGRATED CIRCUIT       |
| 84171587     | Application |               | 8/14/2015   |            | PCT/US2015/045280  | PCT | IN-LINE DEVICE                                                                                   |
| 90039577     | To Be Filed |               |             |            |                    | PCT | Redundancy Design of Cluster Controllers in Handling External Authentication Server Interactions |
| 90039634     | To Be Filed |               |             |            |                    | PCT | Auto-upgrade option for self-organizing, plug-n-play, autonomous WLAN networks                   |
| 83734811     | Application |               | 4/4/2014    |            | PCT/US2014/032920  | PCT | STORING AND RETRIEVING CIPHERTEXT IN DATA STORAGE                                                |
| 83763742     | Published   |               | 1/31/2014   |            | PCT/US2014/014060  | PCT | COMMUNICATING BETWEEN A CLUSTER AND A NODE EXTERNAL TO THE CLUSTER                               |
| 84031527     | Application |               | 12/15/2014  |            | PCT/US2014/070421  | PCT | DATA RESTORATION USING ALLOCATION MAPS                                                           |
| 84034650     | Application |               | 11/6/2014   |            | PCT/US2014/064255  | PCT | DATA CHUNK BOUNDARY                                                                              |
| 84171458     | Application |               | 5/7/2015    |            | PCT/US2015/029608  | PCT | INFORMATION CONTENT OF A DATA CONTAINER                                                          |
| 83270985     | Published   |               | 8/31/2013   |            | PCT/US2013/057743  | PCT | DESCRIBED OBJECT AND DESCRIPTOR                                                                  |
| 83273355     | Published   |               | 7/31/2013   |            | PCT/US2013/053064  | PCT | Calibrating a Tape Drive                                                                         |
| 84113356     | Application |               | 1/29/2015   |            | PCT/US2015/013406  | PCT | COATING SURFACES OF CONDUCTIVE OBJECTS                                                           |
| 83958884     | Application |               | 7/17/2014   |            | PCT/US2014/047098  | PCT | DATA LOAD FROM A DATA SOURCE INTO A TARGET FILE                                                  |
| 84030010     | Application |               | 8/28/2014   |            | PCT/US2014/053154  | PCT | IDENTIFY SERVER CLUSTER BY APPLYING SOCIAL GROUP ANALYSIS                                        |

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| 84117644     | Application  |               | 41992       |            | PCT/US2014/071374  | PCT | SETTING FOR A NETWORK TRAFFIC MANAGEMENT DEVICE BASED ON A TEMPLATE                                                                                     |
| 84260243     | Application  |               | 7/27/2015   |            | PCT/IN2015/050077  | PCT | A Method to automate test cases at Pre-OS and Post OS level                                                                                             |
| 84262756     | Application  |               | 8/14/2015   |            | PCT/US2015/045219  | PCT | PROGRAM DEPLOYMENT ACCORDING TO SERVER EFFICIENCY RANKINGS.                                                                                             |
| 84031158     | Application  |               | 12/31/2014  |            | PCT/US2014/073036  | PCT | ENTERPRISE SERVICE BUS LOGGING                                                                                                                          |
| 84114544     | Application  |               | 1/26/2015   |            | PCT/US2015/012895  | PCT | AUTHENTICATION OF A USER                                                                                                                                |
| 84115769     | Application  |               | 3/10/2015   |            | PCT/US2015/019794  | PCT | AUTHENTICATION FOR MULTIPLE USER DATA STORAGE AND SEPARATION                                                                                            |
| 83266591     | Published    |               | 11/15/2013  |            | PCT/US2013/070447  | PCT | PRODUCT DATA ANALYSIS                                                                                                                                   |
| 84114833     | Application  |               | 1/28/2015   |            | PCT/US2015/013339  | PCT | ELECTROMECHANICAL FORCE-SENSING SWITCH                                                                                                                  |
| 90037327     | To Be Filed  |               |             |            |                    | PCT | Automated Sequential Characterization and Data Collection for Multiple Fans                                                                             |
| 83269405     | Published    |               | 41544       |            | PCT/US2013/062275  | PCT | EXCLUDING FILE SYSTEM OBJECTS FROM RAW IMAGE BACKUPS                                                                                                    |
| 83821014     | Application  |               | 41870       |            | PCT/US2014/051630  | PCT | SEND BUFFER BASED ON MESSAGING TRAFFIC LOAD                                                                                                             |
| 84193891     | Application  |               | 3/25/2015   |            | PCT/US2015/022463  | PCT | STANDARDIZED CUSTOM SURVEYS                                                                                                                             |
| 83205372     | Published    |               | 6/18/2013   |            | PCT/US2013/046295  | PCT | PRIORITIZING EVENT NOTICES UTILIZING PAST-PREFERENCE PAIRINGS                                                                                           |
| 83640313     | Published    |               | 10/30/2013  |            | PCT/US2013/067556  | PCT | Event Log Analysis                                                                                                                                      |
| 83640333     | Application  |               | 10/31/2013  |            | PCT/US2013/067741  | PCT | Treemap Optimization                                                                                                                                    |
| 84113319     | Application  |               | 2/27/2015   |            | PCT/US2015/017955  | PCT | APPLICATION EVENT TRACING                                                                                                                               |
| 84261405     | Application  |               | 7/9/2015    |            | PCT/US2015/039775  | PCT | STAGED APPLICATION ROLLOUT                                                                                                                              |
| 90037725     | Acknowledged |               |             |            |                    | PCT | A method of Semi-supervised learning for classifying back end business transaction logic via url parameters originating from mobile or web user actions |
| 90039677     | To Be Filed  |               |             |            |                    | PCT | An improved algorithm for distributed computation and efficient scaling of a log clustering analytics pipeline                                          |
| 83204705     | Published    |               | 6/28/2013   |            | PCT/US2013/048556  | PCT | HOOK FRAMEWORK                                                                                                                                          |
| 83267845     | Published    |               | 9/30/2013   |            | PCT/CN2013/084802  | PCT | RECORD AND REPLAY OF OPERATIONS ON GRAPHICAL OBJECTS                                                                                                    |
| 83270321     | Published    |               | 41514       |            | PCT/CN2013/082433  | PCT | TESTING MULTI-THREADED APPLICATIONS                                                                                                                     |
| 83820095     | Application  |               | 6/24/2014   |            | PCT/US2014/043855  | PCT | DETERMINING CODE COMPLEXITY SCORES                                                                                                                      |
| 83822574     | Application  |               | 4/29/2014   |            | PCT/US2014/035913  | PCT | MONITORING APPLICATION FLOW OF APPLICATIONS USING A REGULAR OR EXTENDED MODE                                                                            |
| 83862030     | Application  |               | 41739       |            | PCT/US2014/033597  | PCT | PARTIAL SNAPSHOTS FOR CREATING GENERALIZED SNAPSHOTS                                                                                                    |
| 83960507     | Application  |               | 7/29/2014   |            | PCT/CN2014/083218  | PCT | EXECUTABLE CODE ABNORMALITY DETECTION                                                                                                                   |



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| 84030926     | Application  |               | 1/12/2015   |            | PCT/US2015/010972  | PCT | DATA COMPARISON                                                                                              |
| 84111467     | Application  |               | 12/23/2014  |            | PCT/US2014/072029  | PCT | SIMULATION OF A SYNCHRONIZATION OF RECORDS                                                                   |
| 84265086     | Application  |               | 9/8/2015    |            | PCT/US2015/048843  | PCT | AUTOMATIC REGRESSION IDENTIFICATION                                                                          |
| 90068061     | Acknowledged |               |             |            |                    | PCT | Locating UI Objects for Automation TestingUsing a Visual                                                     |
| 84044872     | Application  |               | 41911       |            | PCT/US2014/058144  | PCT | Technical Target Description                                                                                 |
| 84240200     | Application  |               | 8/12/2015   |            | PCT/US2015/044898  | PCT | DETECTION OF EMAIL-RELATED VULNERABILITIES<br>RETRAINING A MACHINE CLASSIFIER BASED ON AUDITED<br>ISSUE DATA |
| 90037078     | To Be Filed  |               |             |            |                    | PCT | Systems and methods for automated auditing of a web form<br>authentication sequence                          |
| 83268901     | Published    |               | 8/14/2013   |            | PCT/IN2013/000501  | PCT | Automating Monitoring Of A Computing Resource In A Cloud-<br>Based Data Center                               |
| 83598129     | Published    |               | 12/5/2013   |            | PCT/US2013/073277  | PCT | Identifying A Monitoring Template For A Managed Service<br>Based On A Service-Level Agreement                |
| 83598232     | Published    |               | 11/26/2013  |            | PCT/US2013/072033  | PCT | Fault Management Service In A Cloud                                                                          |
| 83954951     | Application  |               | 5/29/2014   |            | PCT/US2014/039952  | PCT | ISOLATING PRODUCTION ENVIRONMENT DEBUGGING<br>SESSIONS                                                       |
| 84011327     | Application  |               | 9/10/2014   |            | PCT/US2014/054998  | PCT | CLOUD RESOURCE POOL                                                                                          |
| 90038017     | To Be Filed  |               |             |            |                    | PCT | Detecting Frustrated Users System                                                                            |
| 83953494     | Application  |               | 7/18/2014   |            | PCT/US2014/047194  | PCT | TRANSLATE DATA OPERATIONS BASED ON DATA STRIPE SIZE<br>BACKGROUND                                            |
|              |              |               |             |            |                    |     |                                                                                                              |
| 83958091     | Application  |               | 7/30/2014   |            | PCT/US2014/048946  | PCT | CONTROL POINT DISCOVERY                                                                                      |
| 84142576     | Application  |               | 1/15/2015   |            | PCT/US2015/011549  | PCT | WEBSITE FRAMEWORK                                                                                            |
| 84169131     | Application  |               | 8/20/2015   |            | PCT/CN2015/087710  | PCT | CONTAINERIZED VIRTUAL NETWORK FUNCTION                                                                       |
| 84173061     | Application  |               | 6/12/2015   |            | PCT/US2015/035631  | PCT | SEARCH BASED ON FEATURES OF A PERSON                                                                         |
| 83593446     | Published    |               | 1/2/2014    |            | PCT/US2014/010030  | PCT | Distributed Kernel Thread List Processing for Kernel Patching                                                |
| 83747629     | Application  |               | 4/2/2014    |            | PCT/IN2014/000209  | PCT | DIRECT ACCESS TO NETWORK FILE SYSTEM EXPORTED SHARE                                                          |
| 83777270     | Published    |               | 1/30/2014   |            | PCT/IN2014/000076  | PCT | TRUST FRAMEWORK FOR SECURED DIGITAL INTERACTIONS<br>BETWEEN ENTITIES                                         |
| 83777290     | Published    |               | 1/30/2014   |            | PCT/IN2014/000075  | PCT | PERSISTENT POINTERS FOR PROGRAMS RUNNING ON<br>NVRAM BASED COMPUTERS                                         |
| 90022113     | Application  |               | 7/30/2015   |            | PCT/US2015/042983  | PCT | Improving Performance of Virtual Machines                                                                    |
| 83777436     | Application  |               | 1/31/2014   |            | PCT/US2014/014332  | PCT | EXECUTION OF A QUERY ON DATA UPDATES AND PUSHING<br>QUERY RESULTS                                            |
| 83958128     | Application  |               | 7/31/2014   |            | PCT/US2014/049264  | PCT | Data Merge Processing                                                                                        |
| 83958320     | Application  |               | 11/18/2014  |            | PCT/US2014/066017  | PCT | VIRTUAL FILE SERVER                                                                                          |

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| 84076316     | Application  |               | 11/18/2014  |            | PCT/US2014/066233  | PCT | FILE CREATION                                                                                                    |
| 84107614     | Application  |               | 1/15/2015   |            | PCT/US2015/011586  | PCT | DYNAMICALLY UPDATING METADATA                                                                                    |
| 84141471     | Application  |               | 1/22/2015   |            | PCT/US2015/012482  | PCT | PROVIDING A LOAN OF STORAGE SPACE IN A DATA STORAGE SYSTEM                                                       |
| 84172938     | Application  |               | 3/31/2015   |            | PCT/US2015/023674  | PCT | FILE SERVICE OPERATION ON EXTERNAL HOST                                                                          |
| 84210253     | Application  |               | 4/15/2015   |            | PCT/US2015/025969  | PCT | CONSISTENCY CHECK ON NAMESPACE OF AN ONLINE FILE SYSTEM                                                          |
| 84172792     | Application  |               | 3/4/2015    |            | PCT/US2015/018564  | PCT | PERFORMANCE TESTING USING SERVICE CALL EXECUTION                                                                 |
| 84172815     | Application  |               | 4/6/2015    |            | PCT/US2015/024449  | PCT | CERTIFICATE GENERATION                                                                                           |
| 83267799     | Published    |               | 8/29/2013   |            | PCT/US2013/057252  | PCT | Queries Involving Multiple Databases and Execution Engines                                                       |
| 83267819     | Published    |               | 5/31/2013   |            | PCT/US2013/043761  | PCT | THREE DIMENSIONAL DATA VISUALIZATION                                                                             |
| 83267825     | Published    |               | 8/30/2013   |            | PCT/US2013/057612  | PCT | Identifying Anomalous Behavior of a Monitored Entity                                                             |
| 83584495     | Published    |               | 12/13/2013  |            | PCT/US2013/075016  | PCT | DATA STREAM PROCESSING BASED ON A BOUNDARY PARAMETER                                                             |
| 83598066     | Published    |               | 12/17/2013  |            | PCT/US2013/075651  | PCT | ABSTRACTION LAYER BETWEEN A DATABASE QUERY ENGINE AND A DISTRIBUTED FILE SYSTEM                                  |
| 83623479     | Application  |               | 10/15/2013  |            | PCT/US2013/064934  | PCT | ANALYZING A PARALLEL DATA STREAM USING A SLIDING FREQUENT PATTERN TREE                                           |
| 83819929     | Application  |               | 3/31/2014   |            | PCT/US2014/032396  | PCT | CANDIDATE SERVICES FOR AN APPLICATION                                                                            |
| 83825651     | Application  |               | 4/30/2014   |            | PCT/US2014/036253  | PCT | Parallel Index-based Time Series Similarity Search with In-memory Index Tables on a Multicore Big-Memory Machine |
| 84027743     | Application  |               | 1/30/2015   |            | PCT/US2015/013952  | PCT | COMMON SEARCH DISTANCES IN DATA PARTITIONS                                                                       |
| 84031241     | Application  |               | 8/29/2014   |            | PCT/US2014/053333  | PCT | SECURE INFORMATION RETRIEVAL BASED ON HASH TRANSFORMS                                                            |
| 84034593     | Application  |               | 10/30/2014  |            | PCT/US2014/063218  | PCT | DATA ENTRIES HAVING VALUES FOR FEATURES                                                                          |
| 84230356     | Application  |               | 5/28/2015   |            | PCT/US2015/032786  | PCT | PROCESSING NETWORK DATA USING A GRAPH DATA STRUCTURE                                                             |
| 84260034     | Application  |               | 8/6/2015    |            | PCT/US2015/043932  | PCT | INFLUENCE SPREAD MAXIMIZATION IN SOCIAL NETWORKS                                                                 |
| 90016889     | Application  |               | 9/11/2015   |            | PCT/US2015/049668  | PCT | GRAPH DATABASE AND RELATIONAL DATABASE MAPPING                                                                   |
| 90037118     | To Be Filed  |               |             |            |                    | PCT | Method for Graph Partitioning                                                                                    |
| 83271715     | Application  |               | 7/26/2013   |            | PCT/US2013/052337  | PCT | DATA VIEW BASED ON CONTEXT                                                                                       |
| 83701850     | Published    |               | 10/29/2013  |            | PCT/US2013/067219  | PCT | VIRTUAL MACHINE INTROSPECTION                                                                                    |
| 84111753     | Application  |               | 2/27/2015   |            | PCT/US2015/017921  | PCT | RECOMMENDING VISUALIZATIONS                                                                                      |
| 84173645     | Application  |               | 5/18/2015   |            | PCT/EP2015/060913  | PCT | Automated entity-resolution methods and systems                                                                  |
| 84264880     | Application  |               | 7/31/2015   |            | PCT/EP2015/067657  | PCT | MALWARE MODELLING                                                                                                |
| 90035097     | Acknowledged |               |             |            |                    | PCT | Distribution of Gen-Z Transaction Integrity Keys                                                                 |
| 90037453     | To Be Filed  |               |             |            |                    | PCT | Managing structural types in non-volatile memories                                                               |
| 83204745     | Published    |               | 4/30/2013   |            | PCT/US2013/038909  | PCT | AD-HOC, FACE-RECOGNITION-DRIVEN CONTENT SHARING                                                                  |
| 83629264     | Published    |               | 9/30/2013   |            | PCT/US2013/062569  | PCT | DELIVERING AN EMAIL ATTACHMENT AS A SUMMARY                                                                      |

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| 83267347     | Published   |               | 9/5/2013    |            | PCT/US2013/058170  | PCT | Memristor Structures                                                                   |
| 83623353     | Application |               | 11/12/2013  |            | PCT/US2013/069528  | PCT | NONLINEAR MEMRISTOR DEVICES WITH THREE-LAYER SELECTORS                                 |
| 83623499     | Published   |               | 10/28/2013  |            | PCT/US2013/067071  | PCT | GEOMETRY DEPENDENT VOLTAGE BIASES FOR ASYMMETRIC RESISTIVE MEMORIES                    |
| 83734748     | Published   |               | 3/7/2014    |            | PCT/US2014/021598  | PCT | MEMRISTOR DEVICES WITH A THERMALLY-INSULATING CLADDING                                 |
| 83763716     | Published   |               | 41667       |            | PCT/US2014/013360  | PCT | DATA AND INSTRUCTION SET ENCRYPTION                                                    |
| 83770111     | Published   |               | 1/31/2014   |            | PCT/US2014/014093  | PCT | NEGATIVE DIFFERENTIAL RESISTANCE CIRCUIT ELEMENT                                       |
| 83822694     | Application |               | 4/10/2014   |            | PCT/US2014/033583  | PCT | 1-SELECTOR N-RESISTOR MEMRISTIVE DEVICES                                               |
| 83830563     | Application |               | 4/28/2014   |            | PCT/US2014/035745  | PCT | MULTIMODAL MEMRISTOR MEMORY                                                            |
| 83830583     | Application |               | 4/26/2014   |            | PCT/US2014/035585  | PCT | SWITCHED MEMRISTOR ANALOG TUNING                                                       |
| 83832518     | Application |               | 4/26/2014   |            | PCT/US2014/035586  | PCT | SWITCHED MEMRISTOR ANALOG-TO-DIGITAL CONVERSION                                        |
| 83958486     | Application |               | 41851       |            | PCT/US2014/049298  | PCT | 3D RESISTIVE MEMORY                                                                    |
| 84033173     | Application |               | 41941       |            | PCT/US2014/062977  | PCT | MEMRISTIVE DOT PRODUCT ENGINE FOR VECTOR PROCESSING                                    |
| 84111484     | Application |               | 2/11/2015   |            | PCT/US2015/015393  | PCT | NONVOLATILE MEMORY CROSSBAR ARRAY                                                      |
| 84111653     | Application |               | 1/26/2015   |            | PCT/US2015/012909  | PCT | RESISTIVE MEMORY ARRAYS WITH A NEGATIVE TEMPERATURE COEFFICIENT OF RESISTANCE MATERIAL |
| 84111716     | Application |               | 1/28/2015   |            | PCT/US2015/013214  | PCT | SELECTOR RELAXATION TIME REDUCTION                                                     |
| 84169649     | Application |               | 4/23/2015   |            | PCT/US2015/027284  | PCT | RESISTIVE ELEMENTS TO OPERATE AS A MATRIX OF PROBABILITIES                             |
| 84262736     | Application |               | 8/31/2015   |            | PCT/US2015/047726  | PCT | MATERIAL STACKS FOR LOW CURRENT UNIPOLAR MEMRISTORS                                    |
| 84264694     | Application |               | 8/7/2015    |            | PCT/US2015/044246  | PCT | CROSSBAR ARRAYS FOR CALCULATING MATRIX MULTIPLICATION                                  |
| 84270788     | Application |               | 8/20/2015   |            | PCT/US2015/046112  | PCT | SUPPLY CLAMP CIRCUITS WITH MEMRISTORS                                                  |
| 83199564     | Published   |               | 4/12/2013   |            | PCT/US2013/036502  | PCT | DISTANCE DETERMINATION OF A MOBILE DEVICE                                              |
| 83206033     | Published   |               | 4/30/2013   |            | PCT/US2013/038717  | PCT | GOVERNING BARE METAL GUESTS                                                            |
| 83221562     | Published   |               | 4/12/2013   |            | PCT/US2013/036498  | PCT | DETERMINING AN ANGLE OF DIRECT PATH OF A SIGNAL                                        |
| 83267327     | Published   |               | 8/14/2013   |            | PCT/US2013/055016  | PCT | TRANSMIT ANTENNA SELECTION                                                             |
| 83267341     | Published   |               | 7/31/2013   |            | PCT/US2013/052969  | PCT | DETERMINING THE POSITION OF A MOBILE DEVICE WITHIN A STRUCTURE                         |
| 83733772     | Application |               | 1/31/2014   |            | PCT/US2014/014268  | PCT | LOCALIZATION USING ACCESS POINT                                                        |
| 83957988     | Application |               | 7/30/2014   |            | PCT/US2014/048862  | PCT | Mobility-aware frame aggregation for wireless networks                                 |
| 83983664     | Application |               | 7/30/2014   |            | PCT/US2014/048959  | PCT | NETWORK RESOURCE ALLOCATION PROPOSALS                                                  |
| 84033462     | Application |               | 11/6/2014   |            | PCT/US2014/064394  | PCT | NETWORK POLICY GRAPHS                                                                  |
| 84111796     | Application |               | 5/15/2015   |            | PCT/US2015/031110  | PCT | CORRECTING TIME-OF-FLIGHT MEASUREMENTS                                                 |

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| 84169901     | Application  |               | 3/6/2015    |            | PCT/US2015/019213  | PCT | LOCATION UPDATE SCHEDULING                                                                                                       |
| 84172440     | Application  |               | 3/9/2015    |            | PCT/CN2015/073874  | PCT | PREDICTING AVAILABLE ACCESS POINTS                                                                                               |
| 84220217     | Application  |               | 5/15/2015   |            | PCT/US2015/030973  | PCT | COMPOSITION CONSTRAINTS FOR NETWORK POLICIES                                                                                     |
| 90035146     | Application  |               | 8/27/2015   |            | PCT/US2015/047200  | PCT | OCCUPANCY SENSING                                                                                                                |
| 90039597     | To Be Filed  |               |             |            |                    | PCT | Extended Dynamic Enterprise ANDSF Lite(EDE-ANDSF Lite)<br>Management Solution for Enterprise LTE and WiFi<br>Interworking System |
| 83209886     | Published    |               | 6/20/2013   |            | PCT/US2013/046873  | PCT | GRATING-BASED LIGHT MODULATION EMPLOYING A LIQUID<br>CRYSTAL                                                                     |
| 83271028     | Published    |               | 10/9/2013   |            | PCT/US2013/064137  | PCT | LOSS COMPENSATED OPTICAL SWITCHING                                                                                               |
| 83623562     | Published    |               | 10/31/2013  |            | PCT/US2013/067880  | PCT | MULTIPLIED OPTOELECTRONIC ENGINES                                                                                                |
| 83769109     | Application  |               | 5/7/2014    |            | PCT/US2014/037063  | PCT | POLYMER-CLAD OPTICAL MODULATORS                                                                                                  |
| 83824675     | Application  |               | 4/30/2014   |            | PCT/US2014/036138  | PCT | CONTROLLABLE DIAMOND WAVEGUIDE TUNER                                                                                             |
| 83958526     | Application  |               | 7/25/2014   |            | PCT/US2014/048225  | PCT | TUNABLE OPTICAL DEVICE                                                                                                           |
| 84033571     | Application  |               | 10/23/2014  |            | PCT/US2014/061960  | PCT | OPTICAL FIBER INTERFACE FOR OPTICAL DEVICE PACKAGE                                                                               |
| 84033588     | Application  |               | 10/24/2014  |            | PCT/US2014/062238  | PCT | OPTICAL INTERCONNECT DEVICE                                                                                                      |
| 84111690     | Application  |               | 1/30/2015   |            | PCT/US2015/013749  | PCT | OPTICAL MODULES                                                                                                                  |
| 84169841     | Application  |               | 4/10/2015   |            | PCT/US2015/025295  | PCT | OPTICAL ZIG-ZAGS                                                                                                                 |
| 84169855     | Application  |               | 4/30/2015   |            | PCT/US2015/028483  | PCT | MONOLITHICALLY INTEGRATED PHOTODETECTOR AND<br>RECEIVER                                                                          |
| 84262822     | Application  |               | 7/27/2015   |            | PCT/US2015/042250  | PCT | DOPED ABSORPTION PHOTODIODE                                                                                                      |
| 90035249     | Application  |               | 9/8/2015    |            | PCT/US2015/048952  | PCT | APPARTUS FOR SOLVING ISING PROBLEMS                                                                                              |
| 90068499     | Instructed   |               |             |            |                    | PCT | A Time Skew Free Automatic Gain Control for PAM-4 Optical<br>Front-End Linear Receiver-UHU                                       |
| 90068505     | Instructed   |               |             |            |                    | PCT | Dual-mode noise canceling transimpedance amplifier (TIA)<br>for high sensitivity optical receiver                                |
| 84265106     | Acknowledged |               |             |            |                    | PCT | SOFTWARE KIT RELEASE MANAGEMENT                                                                                                  |
| 84299215     | Application  |               | 7/28/2015   |            | PCT/US2015/042340  | PCT | HETEROGENEOUS HOT SPARE SERVER POOL                                                                                              |
| 90037851     | To Be Filed  |               |             |            |                    | PCT | Performance-Aware Middleware for Multi-Tenant Paas                                                                               |
| 83469453     | Published    |               | 8/19/2013   |            | PCT/US2013/055577  | PCT | ADAPTIVE NETWORK SECURITY POLICIES                                                                                               |
| 83689653     | Published    |               | 12/19/2013  |            | PCT/US2013/076628  | PCT | NETWORK SECURITY SYSTEM TO<br>INTERCEPT INLINE DOMAIN NAME SYSTEM REQUESTS                                                       |
| 84111925     | Application  |               | 4/10/2015   |            | PCT/US2015/025454  | PCT | NETWORK ANOMALY DETECTION                                                                                                        |
| 84114006     | Application  |               | 1/23/2015   |            | PCT/US2015/012654  | PCT | MARKING NODES FOR ANALYSIS BASED ON DOMAIN NAME<br>SYSTEM RESOLUTION                                                             |
| 84261554     | Application  |               | 5/27/2015   |            | PCT/US2015/032638  | PCT | IDENTIFYING ALGORITHMICALLY GENERATED DOMAINS                                                                                    |
| 90037742     | To Be Filed  |               |             |            |                    | PCT | Hardware-Based Programmable Layer 5 and Higher Metadata<br>Capture Machine                                                       |
| 83952472     | Application  |               | 7/21/2014   |            | PCT/US2014/047364  | PCT | REMEDIAL ACTION FOR RELEASE OF THREAT DATA                                                                                       |

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| 83607369     | Published    |               | 9/26/2013   |            | PCT/US2013/061908  | PCT | Task Distribution in Peer to Peer Networks                                                                                                                |
| 83821071     | Application  |               | 7/31/2014   |            | PCT/US2014/049026  | PCT | TEMPLATE COPY TO CACHE                                                                                                                                    |
| 83822651     | Application  |               | 41/59       |            | PCT/IN2014/000291  | PCT | SUPPORT ACTION BASED SELF LEARNING AND ANALYTICS FOR DATACENTER DEVICE HARDWARE/FIRMWARE FAULT MANAGEMENT                                                 |
| 84147359     | Application  |               | 1/23/2015   |            | PCT/CN2015/071461  | PCT | ALIGNED VARIABLE RECLAMATION                                                                                                                              |
| 84171607     | Application  |               | 42265       |            | PCT/US2015/051013  | PCT | IMAGE BASED FAULT STATE DETERMINATION                                                                                                                     |
| 84173041     | Application  |               | 5/6/2015    |            | PCT/US2015/029533  | PCT | PRE-OPERATING SYSTEM CONTENT TRANSMISSION                                                                                                                 |
| 84262776     | Acknowledged |               |             |            |                    | PCT | Cloud-based automated testing service which combines cloud and local infrastructure                                                                       |
| 84263048     | To Be Filed  |               |             |            |                    | PCT | Mechanism and apparatus for dynamic configuration of manageability of computer systems                                                                    |
| 83734857     | Published    |               | 12/6/2013   |            | PCT/US2013/073687  | PCT | TRANSITIVE LOCAL PREDICATES ACROSS MULTIPLE JOINS                                                                                                         |
| 84026850     | Application  |               | 8/15/2014   |            | PCT/US2014/051192  | PCT | MANAGING DATABASE NODES                                                                                                                                   |
| 84115646     | Application  |               | 42083       |            | PCT/US2015/021856  | PCT | BASE USER DEFINED FUNCTIONS                                                                                                                               |
| 90035203     | Acknowledged |               |             |            |                    | PCT | Storing a Collection of Spherical Polygons Using Quadrees Based on Precisely Computing Relative Positions of Points and Arcs in WGS84 system              |
| 83269886     | Published    |               | 8/29/2013   |            | PCT/US2013/057188  | PCT | APPLICATION BROADCAST AND COMPILATION                                                                                                                     |
| 83598046     | Published    |               | 2/21/2014   |            | PCT/US2014/017621  | PCT | MIGRATING CLOUD RESOURCES                                                                                                                                 |
| 83822276     | Application  |               | 4/25/2014   |            | PCT/US2014/035547  | PCT | DATA MANAGEMENT IN A DISTRIBUTED COMPUTING ENVIRONMENT                                                                                                    |
| 84039748     | Application  |               | 9/5/2014    |            | PCT/US2014/054400  | PCT | Heterogeneous network architecture across hybrid clouds                                                                                                   |
| 84261488     | Acknowledged |               |             |            |                    | PCT | Abstraction of Mobility and Workplace Cloud Based Storage to Improve Security and Resilience                                                              |
| 84263094     | Application  |               | 6/24/2015   |            | PCT/US2015/037414  | PCT | ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM INPUT TRANSLATION                                                                                               |
| 84263586     | Acknowledged |               |             |            |                    | PCT | A newer approach to help transform legacy applications to cloud environment using business-process oriented approach, based on process mining algorithms. |
| 84116894     | Application  |               | 42034       |            | PCT/IN2015/000060  | PCT | GENERATION OF DIGITAL DOCUMENTS                                                                                                                           |
| 84031132     | Application  |               | 10/27/2014  |            | PCT/US2014/062407  | PCT | KEY SPLITTING                                                                                                                                             |
| 84170084     | Application  |               | 4/29/2015   |            | PCT/US2015/028241  | PCT | Physical Barrier To Inhibit A Penetration Attack                                                                                                          |
| 84171421     | Application  |               | 4/29/2015   |            | PCT/US2015/028254  | PCT | INHIBITTING ELECTROMAGNETIC FIELD-BASED EAVESDROPPING                                                                                                     |
| 84262324     | Application  |               | 42215       |            | PCT/US2015/042996  | PCT | NETWORK DEVICE EMULATION                                                                                                                                  |
| 90032023     | To Be Filed  |               |             |            |                    | PCT | Visualization of score determination using linked records                                                                                                 |
| 83210550     | Published    |               | 4/30/2013   |            | PCT/US2013/038935  | PCT | MEMORY NETWORK TO ROUTE MEMORY TRAFFIC AND I/O TRAFFIC                                                                                                    |
| 83513389     | Published    |               | 9/26/2013   |            | PCT/US2013/061889  | PCT | UNDOING CHANGES MADE BY THREADS                                                                                                                           |

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| 83629341     | Application |               | 1/16/2014   |            | PCT/US2014/011867  | PCT | NODE CLUSTER SYNCHRONIZATION                                                                                  |
| 83764326     | Published   |               | 41670       |            | PCT/US2014/014068  | PCT | COMMUNICATION IN A HETEROGENEOUS DISTRIBUTED SYSTEM                                                           |
| 83776666     | Published   |               | 1/31/2014   |            | PCT/US2014/014296  | PCT | ORTHOGONAL KEY-VALUE LOCKING                                                                                  |
| 83820241     | Application |               | 41778       |            | PCT/US2014/038569  | PCT | SUBSTRATE SPRAYER                                                                                             |
| 83830483     | Application |               | 5/30/2014   |            | PCT/US2014/040201  | PCT | MEMORY ACCESS SIGNAL DETECTION                                                                                |
| 84037132     | Application |               | 1/29/2015   |            | PCT/US2015/013609  | PCT | HEAP DATA STRUCTURE                                                                                           |
| 84262507     | Application |               | 6/5/2015    |            | PCT/US2015/034368  | PCT | COMPRESSED DATA BLOCK MAPPING                                                                                 |
| 90037871     | To Be Filed |               |             |            |                    | PCT | Bridging the gap between full shared memory coherence and the scale-out model with software-defined coherence |
| 83206926     | Published   |               | 7/11/2013   |            | PCT/US2013/050136  | PCT | TRANSDUCER ARRAY TO WRITE DATA TO TAPE                                                                        |
| 84260145     | Application |               | 42214       |            | PCT/US2015/042679  | PCT | PROTECTING A COMPUTING DEVICE FROM ENVIRONMENTAL ISSUES IN AN ENCLOSURE                                       |
| 83276220     | Published   |               | 7/29/2013   |            | PCT/IN2013/000472  | PCT | WRITING TO FILES AND FILE META-DATA                                                                           |
| 83819064     | Application |               | 7/22/2014   |            | PCT/US2014/047596  | PCT | USING LOCATION ADDRESSED STORAGE AS CONTENT ADDRESSED STORAGE                                                 |
| 83958122     | Application |               | 7/31/2014   |            | PCT/US2014/049262  | PCT | Prioritization Processing                                                                                     |
| 84104731     | Application |               | 1/6/2015    |            | PCT/US2015/010238  | PCT | GENERATING A UNIQUE IDENTIFIER FOR AN OBJECT IN A DISTRIBUTED FILE SYSTEM                                     |
| 84113977     | Application |               | 1/30/2015   |            | PCT/IN2015/000061  | PCT | FAILURE ATOMIC UPDATE OF A SINGLE APPLICATION DATA FILE                                                       |
| 84265581     | Application |               | 7/30/2015   |            | PCT/US2015/042891  | PCT | Preserving Virtual Machine Data                                                                               |
| 83668187     | Published   |               | 10/25/2013  |            | PCT/US2013/066859  | PCT | PRODUCT DEMAND FORECASTING                                                                                    |
| 83216163     | Published   |               | 4/3/2013    |            | PCT/US2013/035172  | PCT | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                   |
| 83268629     | Published   |               | 7/17/2013   |            | PCT/US2013/050907  | PCT | DETERMINE MALFUNCTION STATE OF POWER SUPPLY MODULE                                                            |
| 83597914     | Published   |               | 41604       |            | PCT/US2013/071863  | PCT | HARD DISK DRIVE CARRIER                                                                                       |
| 83735157     | Application |               | 12/13/2013  |            | PCT/US2013/075122  | PCT | CONNECTOR WITH A RETAINER ASSEMBLY                                                                            |
| 83763859     | Application |               | 2/27/2014   |            | PCT/US2014/019007  | PCT | BEHAVIOR MODIFICATION OF A POWER SUPPLY IN RESPONSE TO A DETECTED CONDITION                                   |
| 84042862     | Application |               | 9/29/2014   |            | PCT/US2014/058140  | PCT | IMMERSION COOLED TOP-LOADING COMPUTING CARTRIDGES                                                             |
| 84102321     | Application |               | 11/26/2014  |            | PCT/US2014/067669  | PCT | Transceiver Module                                                                                            |
| 84114804     | Application |               | 1/14/2015   |            | PCT/US2015/011434  | PCT | Forming a Recess in a Multi-Layered Device                                                                    |
| 84143466     | Application |               | 2/27/2015   |            | PCT/US2015/017964  | PCT | CABLE ASSEMBLY WITH CONJOINED ONE-LANE CABLE ASSEMBLIES                                                       |
| 84173032     | Application |               | 4/14/2015   |            | PCT/US2015/025694  | PCT | MAGNETIC FLUID CONNECTOR                                                                                      |
| 84260005     | Application |               | 7/31/2015   |            | PCT/US2015/043255  | PCT | ELECTRO-OPTICAL CONNECTORS                                                                                    |

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| 84260022     | Application  |               | 7/31/2015   |            | PCT/US2015/043176 PCT |    | HEAT EXCHANGERS                                                                                                                            |
| 84262979     | Application  |               | 7/30/2015   |            | PCT/US2015/042882 PCT |    | Removable Module                                                                                                                           |
| 90035280     | Acknowledged |               |             |            | PCT                   |    | HPE Synergy 40 SFF Drive Module                                                                                                            |
| 90037942     | To Be Filed  |               |             |            | PCT                   |    | An extension holder for power cable in deep power cage                                                                                     |
| 83271726     | Published    |               | 7/30/2013   |            | PCT/US2013/052635 PCT |    | RESOURCE MANAGEMENT BASED ON A PROCESS IDENTIFIER                                                                                          |
| 83749123     | Published    |               | 1/30/2014   |            | PCT/US2014/013959 PCT |    | RACK CONTROL MODULE                                                                                                                        |
| 83273375     | Published    |               | 7/31/2013   |            | PCT/US2013/053024 PCT |    | GENERATING WORKLOAD WINDOWS                                                                                                                |
| 83762940     | Application  |               | 1/30/2014   |            | PCT/US2014/013819 PCT |    | JOINT ENCRYPTION AND ERROR CORRECTION ENCODING                                                                                             |
| 83766564     | Application  |               | 3/26/2014   |            | PCT/US2014/031907 PCT |    | NVM OBJECT                                                                                                                                 |
| 83775077     | Published    |               | 2/24/2014   |            | PCT/US2014/018073 PCT |    | REPURPOSABLE BUFFERS FOR TARGET PORT PROCESSING OF A DATA TRANSFER                                                                         |
| 83819608     | Application  |               | 4/30/2014   |            | PCT/US2014/036036 PCT |    | Storage System Bandwidth Adjustment                                                                                                        |
| 83958102     | Application  |               | 7/1/2014    |            | PCT/US2014/045098 PCT |    | Estimating Circuit Board Characteristics                                                                                                   |
| 83958314     | Application  |               | 7/24/2014   |            | PCT/US2014/048001 PCT |    | Storing Metadata                                                                                                                           |
| 84031541     | Application  |               | 10/13/2014  |            | PCT/US2014/060275 PCT |    | CONTROLLING ACCESS TO SECURE MEDIA CONTENT                                                                                                 |
| 84113894     | Application  |               | 42111       |            | PCT/US2015/026426 PCT |    | DATA BLOCK ADDRESS-GENERATED DATA TO TEST A DATA STORAGE DEVICE                                                                            |
| 84113914     | Application  |               | 42034       |            | PCT/US2015/014002 PCT |    | DETECTION OF CONNECTION TYPE                                                                                                               |
| 84170104     | Application  |               | 4/30/2015   |            | PCT/US2015/028543 PCT |    | CONFIGURATION OF A PERIPHERAL COMPONENT INTERCONNECT EXPRESS LINK                                                                          |
|              |              |               |             |            |                       |    | HOST-STORAGE AUTHENTICATION                                                                                                                |
| 84260566     | Application  |               | 8/12/2015   |            | PCT/US2015/044806 PCT |    | DETERMINING POWER STATE SUPPORT                                                                                                            |
| 84261622     | Application  |               | 7/31/2015   |            | PCT/US2015/043319 PCT |    | STORAGE MANAGEMENT                                                                                                                         |
| 90016090     | Application  |               | 8/13/2015   |            | PCT/US2015/045127 PCT |    | OPTICAL BLIND-MATE CONNECTOR AND ADAPTER                                                                                                   |
| 83593460     | Published    |               | 9/30/2013   |            | PCT/US2013/062621 PCT |    | SENDING A DATA FLOW                                                                                                                        |
| 83749272     | Published    |               | 1/30/2014   |            | PCT/US2014/013736 PCT |    | MULTIPLE COMPUTE NODES                                                                                                                     |
| 83776256     | Published    |               | 1/30/2014   |            | PCT/US2014/013816 PCT |    | SUPPORTING INPUT/OUTPUT (I/O) CONNECTIVITY FOR A PRINTED CIRCUIT ASSEMBLY (PCA) IN A HOT AISLE CABLING OR A COLD AISLE CABLING ARRANGEMENT |
| 83957833     | Application  |               | 5/30/2014   |            | PCT/US2014/040302 PCT |    | SECURE TRANSACTIONS IN A MEMORY FABRIC                                                                                                     |
| 84030688     | Application  |               | 10/30/2014  |            | PCT/US2014/063169 PCT |    | REPLICATING DATA USING DUAL-PORT NON-VOLATILE DUAL IN-LINE                                                                                 |
| 84170310     | Application  |               | 4/30/2015   |            | PCT/US2015/028619 PCT |    | MEMORY MODULES                                                                                                                             |
| 84173015     | Application  |               | 8/6/2015    |            | PCT/US2015/044013 PCT |    | DIFFERENCE DATASETS                                                                                                                        |
| 84264433     | Application  |               | 6/4/2015    |            | PCT/US2015/034283 PCT |    | LIGHT COLOR ADJUSTMENT OF A SERVER PANEL LIGHT                                                                                             |
| 84113868     | Application  |               | 2/27/2015   |            | PCT/US2015/018137 PCT |    | CLOUD NETWORK MANAGEMENT                                                                                                                   |
| 83102183     | Published    |               | 1/31/2013   |            | PCT/US2013/024176 PCT |    | NETWORK SWITCH STIMULATION                                                                                                                 |
| 83138333     | Published    |               | 8/7/2013    |            | PCT/IN2013/000486 PCT |    | System State Message In Software Defined Networking                                                                                        |

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| 83140102     | Published    |               | 1/30/2013   |            | PCT/US2013/023751  | PCT | Sending Traffic Policies                                                                                                                |
| 83629063     | Published    |               | 10/11/2013  |            | PCT/US2013/064649  | PCT | UTILIZING COLLECTED DATA FROM A SOFTWARE-DEFINED NETWORKING NETWORK TO DIAGNOSE A USER EXPERIENCE                                       |
| 83766538     | Published    |               | 2/4/2014    |            | PCT/US2014/014543  | PCT | NETWORK SWITCH EXTENSION                                                                                                                |
| 83820979     | Application  |               | 4/30/2014   |            | PCT/US2014/036009  | PCT | REDUCING DATA IN A NETWORK DEVICE                                                                                                       |
| 83988344     | Application  |               | 7/18/2014   |            | PCT/US2014/047221  | PCT | PIPELINE TABLE IDENTIFICATION                                                                                                           |
| 84033419     | Application  |               | 12/2/2014   |            | PCT/US2014/068027  | PCT | SERVICE INSERTION FORWARDING                                                                                                            |
| 90039585     | To Be Filed  |               |             |            |                    | PCT | Method of forwarding acceleration using a cache for 802.11br external bridge port extenders.                                            |
| 83629229     | Published    |               | 11/20/2013  |            | PCT/US2013/070917  | PCT | SERVICE ADVERTISEMENT CACHING                                                                                                           |
| 84033439     | Application  |               | 9/30/2014   |            | PCT/US2014/058273  | PCT | ADVERTISING MULTIPLE SERVICE SET IDENTIFIERS                                                                                            |
| 90037899     | To Be Filed  |               |             |            |                    | PCT | Geolocation Firewall Policy Enforcement For Proxy Connections                                                                           |
| 90039502     | Acknowledged |               |             |            |                    | PCT | Infrastructure for identification, Quality of Service and Application level Control for next-gen voice applications hosted in the cloud |
| 83211145     | Published    |               | 5/16/2013   |            | PCT/US2013/041379  | PCT | SELECTING A STORE FOR DEDUPICATED DATA                                                                                                  |
| 83211151     | Published    |               | 5/16/2013   |            | PCT/US2013/041369  | PCT | SELECTING A STORE FOR DEDUPICATED DATA                                                                                                  |
| 84030874     | Application  |               | 9/22/2014   |            | PCT/US2014/056755  | PCT | IDENTIFICATION OF CONTENT-DEFINED CHUNK BOUNDARIES                                                                                      |
| 84107333     | Application  |               | 12/15/2014  |            | PCT/US2014/070403  | PCT | SNAPSHOT CREATION                                                                                                                       |
| 84116035     | Application  |               | 3/31/2015   |            | PCT/US2015/023555  | PCT | BACKUP OPERATIONS                                                                                                                       |
| 84173682     | Application  |               | 6/12/2015   |            | PCT/US2015/035576  | PCT | DISK STORAGE ALLOCATION                                                                                                                 |
| 83598266     | Published    |               | 11/27/2013  |            | PCT/US2013/072221  | PCT | METHOD AND SYSTEM FOR FACILITATING MULTI-CURRENCY CARD PAYMENT TRANSACTIONS                                                             |
| 84266643     | Application  |               | 42205       |            | PCT/US2015/041140  | PCT | WEB APPLICATION ADJUSTMENT FOR DIFFERENT BROWSERS                                                                                       |
| 84031023     | Application  |               | 10/31/2014  |            | PCT/US2014/063314  | PCT | SYSTEM AND METHOD FOR VULNERABILITY REMEDIATION VERIFICATION                                                                            |
| 84031212     | Application  |               | 10/31/2014  |            | PCT/US2014/063435  | PCT | SECURITY RECORD TRANSFER IN A COMPUTING SYSTEM                                                                                          |
| 84031292     | Application  |               | 41911       |            | PCT/US2014/057971  | PCT | SECURITY CONTROL                                                                                                                        |
| 84115809     | Application  |               | 42073       |            | PCT/US2015/019789  | PCT | DATA SANDBOXING FOR MULTIPLE USER DATA STORAGE AND SEPARATION                                                                           |
| 90046352     | Application  |               | 9/4/2015    |            | PCT/CN2015/088930  | PCT | PASSWORD GENERATION WITH KEY AND DERIVATION PARAMETER                                                                                   |
| 83735200     | Application  |               | 1/31/2014   |            | PCT/US2014/014333  | PCT | TEST PROBE                                                                                                                              |
| 83954358     | Application  |               | 7/29/2014   |            | PCT/US2014/048624  | PCT | LOCKABLE CONNECTOR DEVICE                                                                                                               |
| 84172949     | Application  |               | 2/26/2015   |            | PCT/US2015/017824  | PCT | HOLDING PLATFORM TO HOLD A LOAD AT AN UPRIGHT POSITION AND A LYING POSITION                                                             |

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|--------------|-------------|---------------|-------------|------------|--------------------|-----|--------------------------------------------------------------------------------------------------------------|
| 83268563     | Published   |               | 7/30/2013   |            | PCT/US2013/052631  | PCT | DETERMINING TOPIC RELEVANCE OF AN EMAIL THREAD                                                               |
| 83776717     | Published   |               | 1/30/2014   |            | PCT/US2014/013827  | PCT | SELECTING A BACKUP PROCESS FOR A FILE SYSTEM                                                                 |
| 83618681     | Published   |               | 10/31/2013  |            | PCT/US2013/067854  | PCT | NON-BLOCKING REGISTRATION IN DISTRIBUTED TRANSACTIONS                                                        |
| 83822270     | Application |               | 4/29/2014   |            | PCT/US2014/035908  | PCT | QUERY PLAN POST OPTIMIZATION ANALYSIS AND REOPTIMIZATION                                                     |
| 84115013     | Application |               | 4/3/2015    |            | PCT/US2015/024325  | PCT | COMPRESS AND LOAD MESSAGE INTO SEND BUFFER                                                                   |
| 83635369     | Application |               | 10/29/2013  |            | PCT/US2013/067202  | PCT | PROVIDING INFORMATION TECHNOLOGY SUPPORT                                                                     |
| 83663155     | Published   |               | 10/29/2013  |            | PCT/US2013/067199  | PCT | HIERARCHICAL SERVICE TREES                                                                                   |
| 83748127     | Application |               | 1/27/2014   |            | PCT/US2014/013113  | PCT | CONTINUOUS INTEGRATION WITH REUSABLE CONTEXT AWARE JOBS                                                      |
| 83825665     | Application |               | 4/22/2014   |            | PCT/US2014/034931  | PCT | FLOW AUTOCOMPLETE                                                                                            |
| 83998451     | Application |               | 7/28/2014   |            | PCT/US2014/048397  | PCT | DETECTION OF ABNORMAL TRANSACTION LOOPS                                                                      |
| 84030107     | Application |               | 11/14/2014  |            | PCT/US2014/065586  | PCT | SATISFACTION METRIC FOR CUSTOMER TICKETS                                                                     |
| 84113307     | Application |               | 1/22/2015   |            | PCT/US2015/012371  | PCT | INDEX WEIGHT CALCULATOR                                                                                      |
| 90035134     | Application |               | 8/31/2015   |            | PCT/US2015/047782  | PCT | MESSAGE BASED INFORMATION TECHNOLOGY SERVICE MANAGEMENT                                                      |
| 83618644     | Application |               | 12/14/2013  |            | PCT/US2013/075194  | PCT | Log Analysis Based on User Activity Volume                                                                   |
| 83640410     | Published   |               | 10/30/2013  |            | PCT/US2013/067539  | PCT | PARAMETER SUGGESTION BASED ON USER ACTIVITY                                                                  |
| 84031504     | Application |               | 12/17/2014  |            | PCT/US2014/070817  | PCT | EVALUATING PERFORMANCE OF APPLICATIONS UTILIZING USER EMOTIONAL STATE PENALTIES                              |
| 84171286     | Application |               | 4/30/2015   |            | PCT/US2015/028401  | PCT | CLASSIFICATION OF APPLICATION EVENTS USING CALL STACKS                                                       |
| 84260062     | Application |               | 5/21/2015   |            | PCT/US2015/032010  | PCT | APPLICATION THREAD VISUALIZATION                                                                             |
| 84262813     | Application |               | 7/17/2015   |            | PCT/US2015/040906  | PCT | VISUALIZATION OF A RESOURCE CONFIGURATION WITH A VISUALIZATION RING                                          |
| 83598249     | Published   |               | 11/26/2013  |            | PCT/US2013/071843  | PCT | RECOMMENDING APPLICATION MODIFICATIONS USING IMAGE AREA COUNTS                                               |
| 83663095     | Published   |               | 10/30/2013  |            | PCT/US2013/067480  | PCT | RECORDING AN APPLICATION TEST                                                                                |
| 84113038     | Application |               | 12/9/2014   |            | PCT/US2014/069290  | PCT | SEPARATING TEST VERIFICATIONS FROM TEST EXECUTIONS                                                           |
| 84172889     | Application |               | 8/4/2015    |            | PCT/US2015/043588  | PCT | SELECTIVE APPLICATION TESTING                                                                                |
| 84266554     | Application |               | 7/28/2015   |            | PCT/US2015/042375  | PCT | APPLICATION LAUNCH STATE DETERMINATION                                                                       |
| 90037819     | To Be Filed |               |             |            |                    | PCT | HPE Software product privacy control – Privacy risk score                                                    |
| 90037839     | To Be Filed |               |             |            |                    | PCT | Leveraging application features usage by dynamic analysis of user behavior in multi tenancy web applications |
| 83618392     | Published   |               | 8/27/2013   |            | PCT/US2013/056828  | PCT | DETERMINING MALWARE BASED ON SIGNAL TOKENS                                                                   |
| 83273120     | Published   |               | 10/30/2013  |            | PCT/US2013/067439  | PCT | MODIFYING REALIZED TOPOLOGIES                                                                                |
| 83273166     | Published   |               | 10/30/2013  |            | PCT/US2013/067542  | PCT | INSTANTIATING A TOPOLOGY-BASED SERVICE USING A BLUEPRINT AS INPUT                                            |

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| 83829933     | Application |               | 4/25/2014   |            | PCT/US2014/035498 PCT | PCT | OPTIMIZING SCALING BASED ON REAL USER EXPERIENCE                                                                                                                                             |
| 83961783     | Application |               | 9/30/2014   |            | PCT/US2014/058330 PCT | PCT | TOPOLOGY BASED MANAGEMENT WITH STAGE AND VERSION POLICIES                                                                                                                                    |
| 84044262     | Application |               | 1/6/2015    |            | PCT/US2015/010315 PCT | PCT | SUPPORTING INTEROPERABILITY IN CLOUD ENVIRONMENTS                                                                                                                                            |
| 90035363     | To Be Filed |               |             |            |                       | PCT | Deployment of application by automatically identifying and integrating the platform dependencies at runtime using simple definitions                                                         |
| 83269980     | Published   |               | 8/20/2013   |            | PCT/US2013/055682 PCT | PCT | POINT OF SALE DEVICE LEVERAGING A PAYMENT UNIFICATION SERVICE                                                                                                                                |
| 83602697     | Published   |               | 12/20/2013  |            | PCT/US2013/076873 PCT | PCT | MESSAGE ASSOCIATION WITH A CASE BASED ON A CASE HANDLE                                                                                                                                       |
| 83946240     | Published   |               | 5/12/2014   |            | PCT/US2014/037689 PCT | PCT | METHODS TO UPDATE PORTALS                                                                                                                                                                    |
| 84012586     | Application |               | 41845       |            | PCT/CN2014/083898 PCT | PCT | LOCAL DATABASE CACHE                                                                                                                                                                         |
| 84029958     | Application |               | 41940       |            | PCT/US2014/062603 PCT | PCT | MEDIA CONTENT DOWNLOAD TIME                                                                                                                                                                  |
| 84037163     | Application |               | 9/5/2014    |            | PCT/US2014/054228 PCT | PCT | PURCHASE SUPPORT                                                                                                                                                                             |
| 8414575      | Application |               | 1/29/2015   |            | PCT/US2015/013573 PCT | PCT | ENCODER                                                                                                                                                                                      |
| 83602717     | Application |               | 10/14/2013  |            | PCT/US2013/064893 PCT | PCT | PACKAGE DEPENDENCY MAPS FOR DISTRIBUTED COMPUTING                                                                                                                                            |
| 84031186     | Application |               | 10/8/2014   |            | PCT/US2014/059770 PCT | PCT | RESOURCE FEDERATION                                                                                                                                                                          |
| 84043506     | Application |               | 9/25/2014   |            | PCT/US2014/057469 PCT | PCT | IDENTIFICATION OF A COMPONENT FOR UPGRADE                                                                                                                                                    |
| 90037427     | To Be Filed |               |             |            |                       | PCT | (Chameleon) Method for using Natural Language, Code Completion and Advanced Templates including Synonyms, Dynamic Templates, and Template Stringing and Conditions to Generate Computer Code |
| 83777381     | Application |               | 41670       |            | PCT/US2014/014248 PCT | PCT | FILE SYSTEM STORAGE                                                                                                                                                                          |
| 83820939     | Application |               | 7/10/2014   |            | PCT/US2014/046183 PCT | PCT | Improving Startup Time Of Managed Code                                                                                                                                                       |
| 90030657     | Application |               | 9/29/2015   |            | PCT/US2015/052867 PCT | PCT | APPLICATION MANAGEMENT DATA                                                                                                                                                                  |
| 90037988     | To Be Filed |               |             |            |                       | PCT | System and method for stateless OS deployment to compute nodes                                                                                                                               |
| 83268958     | Published   |               | 11/13/2013  |            | PCT/US2013/069851 PCT | PCT | NON-BINARY RANK MULTIPLICATION OF MEMORY MODULE                                                                                                                                              |
| 83757696     | Published   |               | 1/30/2014   |            | PCT/US2014/013734 PCT | PCT | ACCESS CONTROLLED MEMORY REGION                                                                                                                                                              |
| 83757742     | Published   |               | 1/31/2014   |            | PCT/US2014/014055 PCT | PCT | ACCESSING A RESISTIVE STORAGE ELEMENT-BASED MEMORY CELL ARRAY                                                                                                                                |
| 83757902     | Published   |               | 1/28/2014   |            | PCT/US2014/013376 PCT | PCT | RE-INITIALIZING MEMORY ARRAYS                                                                                                                                                                |
| 83757908     | Published   |               | 1/31/2014   |            | PCT/US2014/014041 PCT | PCT | IDENTIFYING MEMORY REGIONS THAT CONTAIN REMAPPED MEMORY LOCATIONS                                                                                                                            |
| 83757922     | Published   |               | 1/31/2014   |            | PCT/US2014/014018 PCT | PCT | REMAPPING MEMORY LOCATIONS IN A MEMORY ARRAY                                                                                                                                                 |

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| 83952506     | Application  |               | 8/8/2014    |            | PCT/US2014/050406  | PCT | ERROR COUNTERS ON A MEMORY DEVICE                                                               |
| 83957919     | Application  |               | 41884       |            | PCT/US2014/053704  | PCT | SERIALIZING ACCESS TO FAULT TOLERANT MEMORY                                                     |
| 84030525     | Application  |               | 10/29/2014  |            | PCT/US2014/062848  | PCT | INCLUDING NODE AND PROCESS IDENTIFIERS IN A TRANSACTION                                         |
| 84033044     | Application  |               | 10/28/2014  |            | PCT/US2014/062593  | PCT | MEDIA CONTROLLER WITH COORDINATION BUFFER                                                       |
| 84033101     | Application  |               | 41941       |            | PCT/US2014/062886  | PCT | COMMITTING ALTERED METADATA TO A NON-VOLATILE STORAGE DEVICE                                    |
| 84111833     | Application  |               | 42033       |            | PCT/US2015/013460  | PCT | ERASURE MULTI-CHECKSUM ERROR CORRECTION CODE                                                    |
| 84112812     | Application  |               | 12/22/2014  |            | PCT/US2014/071922  | PCT | STATUS FOR GENERATED DATA IMAGE                                                                 |
| 84114518     | Application  |               | 12/19/2014  |            | PCT/US2014/071673  | PCT | FLUSHING DATA CONTENT IN RESPONSE TO A POWER LOSS EVENT FOR A PROCESSOR                         |
| 84170247     | Application  |               | 4/22/2015   |            | PCT/US2015/027028  | PCT | STATUS SIGNAL COMBINED ONTO POWER VOLTAGE                                                       |
| 84262272     | Application  |               | 7/31/2015   |            | PCT/US2015/043236  | PCT | Prioritizing Tasks for Copying to Nonvolatile Memory                                            |
| 90035114     | Acknowledged |               |             |            |                    | PCT | Autonomous Memory Device                                                                        |
| 90037968     | To Be Filed  |               |             |            |                    | PCT | On-DRAM Patrol Scrub during refresh command                                                     |
| 90046392     | Application  |               | 9/15/2015   |            | PCT/US2015/050124  | PCT | PRINTED CIRCUIT BOARD INCLUDING THROUGH-HOLE VIAS                                               |
| 83271500     | Published    |               | 7/31/2013   |            | PCT/US2013/052887  | PCT | Determining a Level of Risk for Making a Change Using a Neuro Fuzzy Expert System               |
| 83271517     | Published    |               | 7/31/2013   |            | PCT/US2013/052980  | PCT | COMPARING RESPONSE TIMES WITH GOAL TIMES                                                        |
| 83958059     | Application  |               | 7/30/2014   |            | PCT/US2014/048871  | PCT | DETECTING VASCULAR CONDITIONS IN ANIMAL BODIES                                                  |
| 84029981     | Application  |               | 9/12/2014   |            | PCT/US2014/055337  | PCT | RADIO FREQUENCY IDENTIFICATION CARD MONITOR                                                     |
| 90036946     | Acknowledged |               |             |            |                    | PCT | Instrument for Early Identification of Perceived Innovation Potential of Informational Products |
| 83207859     | Application  |               | 6/24/2013   |            | PCT/IN2013/000390  | PCT | Topic Based Classification of Documents                                                         |
| 83209777     | Published    |               | 4/30/2013   |            | PCT/US2013/038895  | PCT | Incrementally Updating Statistics                                                               |
| 83209791     | Published    |               | 5/1/2013    |            | PCT/US2013/039055  | PCT | CONTENT CLASSIFICATION                                                                          |
| 83623590     | Application  |               | 10/31/2013  |            | PCT/US2013/067679  | PCT | DATA PROCESSING SYSTEM INCLUDING A SEARCH ENGINE                                                |
| 83734871     | Published    |               | 41628       |            | PCT/US2013/076796  | PCT | Generating a Visualization of a Metric at a Level of Execution                                  |
| 83747145     | Published    |               | 41708       |            | PCT/US2014/022879  | PCT | PARALLELIZING SQL USER DEFINED TRANSFORMATION FUNCTIONS                                         |
| 83776611     | Application  |               | 6/12/2014   |            | PCT/CN2014/079747  | PCT | RECOMMENDING OF AN ITEM TO A USER                                                               |
| 83822605     | Application  |               | 4/28/2014   |            | PCT/US2014/035617  | PCT | Term Chain Clustification                                                                       |
| 83822671     | Application  |               | 5/21/2014   |            | PCT/US2014/039009  | PCT | Bipartite Graph Display                                                                         |
| 83824766     | Application  |               | 5/22/2014   |            | PCT/US2014/039150  | PCT | USER DEFINED FUNCTION, CLASS CREATION FOR EXTERNAL DATA SOURCE                                  |
| 83954146     | Application  |               | 7/10/2014   |            | PCT/US2014/046189  | PCT | ACCESS<br>Data Categorization Using Named Entity Extraction                                     |

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| 83954152     | Application  |               | 41/89       |            | PCT/US2014/040234  | PCT | A way of choosing the informative columns from a wide range of data that contains data of various types (numeric, categorical, etc.). |
| 83954272     | Application  |               | 7/31/2014   |            | PCT/CN2014/083379  | PCT | RANK AGGREGATION BASED ON A MARKOV MODEL                                                                                              |
| 83954292     | Application  |               | 7/29/2014   |            | PCT/US2014/048642  | PCT | DETECTING SEMANTIC SIMILARITY IN A STRUCTURED DATASET                                                                                 |
| 83954312     | Application  |               | 7/23/2014   |            | PCT/US2014/047803  | PCT | PROXIMITY OF DATA TERMS BASED ON WALSH-HADAMARD TRANSFORMS                                                                            |
| 84028965     | Application  |               | 11/26/2014  |            | PCT/US2014/067633  | PCT | READ-OPTIMIZED DATABASE CHANGES                                                                                                       |
| 84115786     | Application  |               | 4/13/2015   |            | PCT/CN2015/076453  | PCT | Systems and Methods for Weak Tie Aware Social Prediction                                                                              |
| 84115829     | Application  |               | 3/12/2015   |            | PCT/US2015/020277  | PCT | DATABASE RECORDS ASSOCIATED WITH A TRIE                                                                                               |
| 84115849     | Application  |               | 1/29/2015   |            | PCT/US2015/013447  | PCT | DATA ANALYTICS ON ENCRYPTED DATA ELEMENTS                                                                                             |
| 84262830     | Application  |               | 9/11/2015   |            | PCT/US2015/049737  | PCT | METHOD CALL ON AN OBJECT IN A PARALLEL CLASS HIERARCHY                                                                                |
| 84262876     | Application  |               | 8/17/2015   |            | PCT/US2015/045471  | PCT | INTERACTIVE ANALYTICS INTERFACES BASED ON CONTEXT MODIFICATIONS                                                                       |
| 90037129     | To Be Filed  |               |             |            |                    | PCT | Distributed system for real-time analytics and lossy transmission of data streams under limited computing and networking resources    |
| 90037261     | Acknowledged |               |             |            |                    | PCT | Type-Safe Namespaces                                                                                                                  |
| 90037278     | To Be Filed  |               |             |            |                    | PCT | Garbage Collection with Contingent Pointers                                                                                           |
| 83631227     | Published    |               | 10/31/2013  |            | PCT/US2013/067770  | PCT | TRUSTED FUNCTION BASED DATA ACCESS SECURITY CONTROL                                                                                   |
| 83766584     | Application  |               | 3/14/2014   |            | PCT/US2014/029030  | PCT | SEMANTIC RESTRICTION                                                                                                                  |
| 83832801     | Application  |               | 4/28/2014   |            | PCT/EP2014/058624  | PCT | Probabilistic – Non-probabilistic Pnp) Multiplex Graph Queries                                                                        |
| 83957956     | Application  |               | 7/23/2014   |            | PCT/US2014/047773  | PCT | ATTRIBUTE-BASED CRYPTOGRAPHY                                                                                                          |
| 83959665     | Application  |               | 6/30/2014   |            | PCT/US2014/044875  | PCT | CONCURRENT DEAD ACTOR COLLECTION                                                                                                      |
| 84031043     | Application  |               | 10/28/2014  |            | PCT/US2014/062659  | PCT | ENTITY ANONYMIZATION FOR A QUERY DIRECTED TO A MULTIPLEX GRAPH                                                                        |
| 84240188     | Application  |               | 7/7/2015    |            | PCT/EP2015/065514  | PCT | Graph Expansion via Aggregation Vertices to Represent Query Results                                                                   |
| 84260294     | Application  |               | 8/28/2015   |            | PCT/US2015/047380  | PCT | PROPAGATING BELIEF INFORMATION ABOUT MALICIOUS AND BENIGN NODES                                                                       |
| 84264771     | Application  |               | 9/14/2015   |            | PCT/US2015/049936  | PCT | SECURE MEMORY SYSTEMS                                                                                                                 |
| 84264894     | Application  |               | 42230       |            | PCT/EP2015/068792  | PCT | DATA REPLICATION IN MEMORY SYSTEMS                                                                                                    |
| 84265624     | Application  |               | 42230       |            | PCT/EP2015/068765  | PCT | Systematic policy-based type-aware integrity and confidentiality marking of large-scale data (for the Machine)                        |

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| 84265661     | Application |               | 4/22/16     |            | PCT/EP2015/067661  | PCT | MALWARE MODELLING                                                                              |
| 84265681     | Application |               | 7/30/2015   |            | PCT/EP2015/067543  | PCT | Cryptographic Identities of Nodes in TheMachine                                                |
| 90037026     | Application |               | 8/28/2015   |            | PCT/US2015/047497  | PCT | EXTRACTED DATA CLASSIFICATION TO DETERMINE IF A USER'S PACKET IS MALICIOUS                     |
| 90037859     | To Be Filed |               |             |            |                    | PCT | Instant memory snapshots for memory forensics and malware detection on a memory fabric machine |
| 83271812     | Published   |               | 11/15/2013  |            | PCT/US2013/070418  | PCT | SELECTING A TASK OR A SOLUTION                                                                 |
| 83629272     | Published   |               | 9/27/2013   |            | PCT/US2013/062348  | PCT | NOTIFYING A USER OF CRITICAL EMAILS VIA TEXT MESSAGES                                          |
| 83953153     | Application |               | 6/10/2014   |            | PCT/US2014/041773  | PCT | PURCHASING OPTION INCLUDING AN EXECUTION QUALITY-UNCERTAINTY PAIR                              |
| 83953585     | Application |               | 8/8/2014    |            | PCT/IN2014/000520  | PCT | TRUNCATION POINT SELECTION                                                                     |
| 84112978     | Application |               | 1/30/2015   |            | PCT/US2015/013849  | PCT | BROADCASTING USER PRESENCE WITH RESPECT TO AN INDOOR POSITIONING SYSTEM                        |
| 83623367     | Published   |               | 10/29/2013  |            | PCT/US2013/067268  | PCT | RESISTIVE CROSSPOINT MEMORY ARRAY SENSING                                                      |
| 83763853     | Published   |               | 1/31/2014   |            | PCT/US2014/014227  | PCT | NON-VOLATILE MEMORY WITH MULTIPLE LATENCY TIERS                                                |
| 83952941     | Application |               | 11/14/2014  |            | PCT/US2014/065606  | PCT | MEMORY CONTROLLERS                                                                             |
| 83957856     | Application |               | 7/28/2014   |            | PCT/US2014/048449  | PCT | ADJUSTING SWITCHING PARAMETERS OF A MEMRISTOR ARRAY                                            |
| 84033038     | Application |               | 10/31/2014  |            | PCT/US2014/063394  | PCT | REUSING SNEAK CURRENT IN ACCESSING MEMORY CELLS                                                |
| 84033456     | Application |               | 10/30/2014  |            | PCT/US2014/063213  | PCT | DOUBLE BIAS MEMRISTIVE DOT PRODUCT ENGINE FOR VECTOR PROCESSING                                |
| 84033685     | Application |               | 4/19/12     |            | PCT/US2014/071345  | PCT | NEGATIVE DIFFERENTIAL RESISTANCE (NDR) DEVICE BASED ON FAST DIFFUSIVE METAL ATOMS              |
| 84111438     | Application |               | 3/20/2015   |            | PCT/US2015/021686  | PCT | MEMRISTIVE DEVICE WITH DOPED SOL-GEL SWITCHING LAYER                                           |
| 84111501     | Application |               | 2/27/2015   |            | PCT/US2015/017976  | PCT | SUPERLINEAR SELECTORS                                                                          |
| 84111644     | Application |               | 1/30/2015   |            | PCT/US2015/013877  | PCT | DETERMINING A CURRENT IN A MEMORY ELEMENT OF A CROSSBAR ARRAY                                  |
| 84111704     | Application |               | 1/23/2015   |            | PCT/US2015/012715  | PCT | FILM-EDGE TOP ELECTRODE                                                                        |
| 84169666     | Application |               | 4/15/2015   |            | PCT/US2015/025860  | PCT | RESISTIVE RANDOM ACCESS MEMORY (RRAM) SYSTEM                                                   |
| 84169832     | Application |               | 8/11/2015   |            | PCT/US2015/044724  | PCT | THERMAL INKJET ELECTROSTATIC DISCHARGE MEMRISTIVE SWITCHING ELEMENTS                           |
| 84171246     | Application |               | 4/16/2015   |            | PCT/US2015/026215  | PCT | RESISTIVE MEMORY ARRAYS FOR PERFORMING MULTIPLY-ACCUMULATE OPERATIONS                          |
| 84171266     | Application |               | 4/29/2015   |            | PCT/US2015/028208  | PCT | DISCRETE-TIME ANALOG FILTERING                                                                 |
| 90037779     | To Be Filed |               |             |            |                    | PCT | BIASING CROSSBAR MEMORY ARRAYS                                                                 |
| 83139306     | Published   |               | 1/31/2013   |            | PCT/US2013/024132  | PCT | INDEXED SHAPED GRAPH CREATION                                                                  |
| 83629043     | Published   |               | 10/31/2013  |            | PCT/US2013/067740  | PCT | Wireless Software-Defined Networking                                                           |

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| 83733783     | Published    |               | 2/10/2014   |            | PCT/US2014/015621  | PCT | DISTANCE ESTIMATION                                                                                                                                                               |
| 83820541     | Application  |               | 7/7/2014    |            | PCT/CN2014/081718  | PCT | Inheritance of ANQP Elements                                                                                                                                                      |
| 84033190     | Application  |               | 12/9/2014   |            | PCT/US2014/069386  | PCT | STORAGE MEDIA SECTIONS WITH ALTERNATIVE CELLS                                                                                                                                     |
| 84220815     | Application  |               | 6/4/2015    |            | PCT/CN2015/080790  | PCT | GT-Ranking Method on High Performance WLAN Availability Prediction                                                                                                                |
| 84264147     | Application  |               | 6/26/2015   |            | PCT/US2015/038011  | PCT | TRANSMISSIONS OF UNICAST FRAMES TO CLIENT DEVICES                                                                                                                                 |
| 90039651     | To Be Filed  |               |             |            |                    | PCT | Boosting Graph for More Efficient WLAN Discovery                                                                                                                                  |
| 83271019     | Published    |               | 7/31/2013   |            | PCT/US2013/052802  | PCT | OPTICAL CONNECTOR ALIGNMENT                                                                                                                                                       |
| 83623553     | Published    |               | 10/22/2013  |            | PCT/US2013/066081  | PCT | HYBRID CIRCUIT-PACKET SWITCH                                                                                                                                                      |
| 83734739     | Published    |               | 2/28/2014   |            | PCT/US2014/019393  | PCT | LASING OUTPUT BASED ON VARYING MODAL INDEX                                                                                                                                        |
| 84033559     | Application  |               | 41940       |            | PCT/US2014/062619  | PCT | PHOTONIC INTERPOSER WITH WAFER BONDED MICROLENSES                                                                                                                                 |
| 84111541     | Application  |               | 4/10/2015   |            | PCT/US2015/025266  | PCT | OVERMOLEDDED FILTERS                                                                                                                                                              |
| 84262607     | Application  |               | 7/21/2015   |            | PCT/US2015/041323  | PCT | RING-RESONATOR MODULATION OF AN OPTICAL SIGNAL                                                                                                                                    |
| 90035320     | To Be Filed  |               |             |            |                    | PCT | Ring modulator and tunable multiplexer                                                                                                                                            |
| 83825917     | Application  |               | 4/30/2014   |            | PCT/US2014/036197  | PCT | SERVICE ONBOARDING                                                                                                                                                                |
| 84031464     | Application  |               | 1/22/2015   |            | PCT/US2015/012362  | PCT | POLICY BASED WORKLOAD SCALER                                                                                                                                                      |
| 84107173     | Application  |               | 11/19/2014  |            | PCT/US2014/066392  | PCT | TESTING A CLOUD SERVICE                                                                                                                                                           |
| 84262710     | Application  |               | 7/30/2015   |            | PCT/US2015/042964  | PCT | Billing Workflow Injection for OpenStack                                                                                                                                          |
| 90035343     | Acknowledged |               |             |            |                    | PCT | Dynamic Slave Node selection from node pool based on Job in a Build system (jenkins). The proposed solution describes an intelligent way to select slave nodes based on job type. |
|              |              |               |             |            |                    |     |                                                                                                                                                                                   |
| 83820521     | Application  |               | 4/30/2014   |            | PCT/US2014/036149  | PCT | PACKET LOGGING                                                                                                                                                                    |
| 83833319     | Application  |               | 4/15/2014   |            | PCT/US2014/034202  | PCT | CONFIGURABLE NETWORK SECURITY                                                                                                                                                     |
| 84173662     | Application  |               | 5/29/2015   |            | PCT/US2015/033343  | PCT | POTENTIAL BLOCKING IMPACTS                                                                                                                                                        |
| 84264702     | Application  |               | 7/31/2015   |            | PCT/US2015/043053  | PCT | PROXY-CONTROLLED COMPARTMENTALIZED DATABASE ACCESS                                                                                                                                |
| 90037052     | To Be Filed  |               |             |            |                    | PCT | Distributed Design of LoadBalancer                                                                                                                                                |
| 83623424     | Published    |               | 9/30/2013   |            | PCT/US2013/062675  | PCT | SERVER DOWNTIME METERING                                                                                                                                                          |
| 83820126     | Application  |               | 41759       |            | PCT/IN2014/000292  | PCT | ON DEMAND REMOTE DIAGNOSTICS FOR HARDWARE COMPONENT FAILURE AND DISK DRIVE DATA RECOVERY USING EMBEDDED STORAGE MEDIA                                                             |
| 83820481     | Application  |               | 4/10/2014   |            | PCT/US2014/033644  | PCT | CONNECTION CLASSIFICATION                                                                                                                                                         |
| 83822625     | Application  |               | 3/31/2014   |            | PCT/US2014/032332  | PCT | MEMORY UNIT WITH DATA SEGMENT INFORMATION IN HEADER                                                                                                                               |
| 83953459     | Application  |               | 8/29/2014   |            | PCT/US2014/053314  | PCT | RESOURCE TREES BY MANAGEMENT CONTROLLER                                                                                                                                           |
| 83953479     | Application  |               | 11/13/2014  |            | PCT/IN2014/000719  | PCT | DUAL PURPOSE BOOT REGISTERS                                                                                                                                                       |
| 84113748     | Application  |               | 42009       |            | PCT/US2015/010143  | PCT | STORAGE DEVICE FLASHING OPERATION                                                                                                                                                 |
| 84171332     | Application  |               | 4/30/2015   |            | PCT/US2015/028574  | PCT | DEEP OFF POWER STATES                                                                                                                                                             |

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| 83734845     | Published    |               | 12/6/2013   |            | PCT/US2013/073693  | PCT | FLEXIBLE SCHEMA TABLE                                                                                |
| 84172491     | Application  |               | 4/30/2015   |            | PCT/US2015/028636  | PCT | DYNAMIC FUNCTION INVOCATION                                                                          |
| 84264622     | Application  |               | 8/7/2015    |            | PCT/US2015/044345  | PCT | IDENTIFYING SHORTEST PATHS                                                                           |
| 90015758     | Application  |               | 42222       |            | PCT/US2015/044071  | PCT | QUERY PATH WITH AGGREGATE PROJECTION                                                                 |
| 83598037     | Published    |               | 2/21/2014   |            | PCT/US2014/017607  | PCT | MIGRATING CLOUD RESOURCES                                                                            |
| 84114435     | Application  |               | 2/10/2015   |            | PCT/US2015/015146  | PCT | DRUG DISPENSER                                                                                       |
| 84263606     | Application  |               | 7/8/2015    |            | PCT/US2015/039526  | PCT | Orchestration Template Generation                                                                    |
| 84265223     | Application  |               | 8/21/2015   |            | PCT/US2015/046374  | PCT | ADJUSTING CLOUD-BASED EXECUTION ENVIRONMENT BY NEURAL NETWORK                                        |
| 84228721     | Application  |               | 4/20/2015   |            | PCT/US2015/026585  | PCT | SECURITY INDICATOR SCORES                                                                            |
| 84251784     | Application  |               | 6/26/2015   |            | PCT/US2015/038139  | PCT | ALERTS FOR COMMUNITIES OF A SECURITY INFORMATION SHARING PLATFORM                                    |
| 84264665     | Application  |               | 6/18/2015   |            | PCT/US2015/036508  | PCT | PROTECTED LOADING OF A MODULE                                                                        |
| 90031991     | To Be Filed  |               |             |            |                    | PCT | Source reliability and authenticity and their effects on score computation                           |
| 90068081     | Acknowledged |               |             |            |                    | PCT | Analyst Profile Obfuscation and Privacy Preserving Badge Management for Security Information Sharing |
| 83209857     | Published    |               | 5/30/2013   |            | PCT/US2013/043237  | PCT | SEPARATE MEMORY CONTROLLERS TO ACCESS DATA IN MEMORY                                                 |
| 83210567     | Published    |               | 5/29/2013   |            | PCT/US2013/042980  | PCT | INVOKING AN ERROR HANDLER TO HANDLE AN UNCORRECTABLE ERROR                                           |
| 83213767     | Published    |               | 3/15/2013   |            | PCT/CN2013/072674  | PCT | CO-PROCESSOR-BASED ARRAY-ORIENTED DATABASE PROCESSING                                                |
| 83271855     | Published    |               | 7/31/2013   |            | PCT/US2013/053040  | PCT | INDEXING ACCELERATORS WITH MEMORY-LEVEL PARALLELISM SUPPORT                                          |
| 83273853     | Published    |               | 7/31/2013   |            | PCT/US2013/052930  | PCT | GLOBAL ERROR CORRECTION                                                                              |
| 83820501     | Application  |               | 7/15/2014   |            | PCT/US2014/046728  | PCT | DATABASE TRANSACTION REPLAY                                                                          |
| 83830491     | Application  |               | 4/30/2014   |            | PCT/US2014/036236  | PCT | PARTITIONABLE TERNARY CONTENT ADDRESSABLE MEMORY (TCAM) FOR USE WITH A BLOOM FILTER                  |
| 83953256     | Application  |               | 7/31/2014   |            | PCT/US2014/049101  | PCT | PLATFORM CONFIGURATION SELECTION BASED ON A DEGRADED MAKESPAN                                        |
| 84030631     | Application  |               | 10/31/2014  |            | PCT/US2014/063479  | PCT | INTEGRATED HETEROGENEOUS PROCESSING UNITS                                                            |
| 84089394     | Application  |               | 10/26/2014  |            | PCT/US2014/062305  | PCT | PROCESSING A QUERY USING TRANSFORMED RAW DATA                                                        |
| 84113788     | Application  |               | 42013       |            | PCT/US2015/010862  | PCT | Garbage collection for persistent memory                                                             |
| 84114412     | Application  |               | 42034       |            | PCT/US2015/013969  | PCT | MEMORY NETWORK TO PRIORITIZE PROCESSING OF A MEMORY ACCESS REQUEST                                   |
| 84261542     | Application  |               | 7/24/2015   |            | PCT/US2015/041899  | PCT | SCHEDULING JOBS IN A COMPUTING CLUSTER                                                               |

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| 90035217     | To Be Filed |               |             |            |                    | PCT | An Extended Performance Emulation Environment for Non-Generation Non-Volatile Memory with STORE operations |
| 90037799     | To Be Filed |               |             |            |                    | PCT | Using Commodity Hardware                                                                                   |
| 83822479     | Application |               | 4/29/2014   |            | PCT/US2014/035805  | PCT | Multistage Hybrid Cooling Solution with Passive and Active Cooling                                         |
| 83954859     | Application |               | 7/31/2014   |            | PCT/US2014/049268  | PCT | NETWORK MANAGEMENT USING PORT ANNOUNCEMENTS                                                                |
| 84115056     | Application |               | 2/20/2015   |            | PCT/US2015/016802  | PCT | SERVICE REQUEST MODIFICATION                                                                               |
| 83852635     | Published   |               | 4/3/2014    |            | PCT/US2014/032868  | PCT | PROVIDING A REDUNDANT CONNECTION IN RESPONSE TO A MODIFIED CONNECTION                                      |
| 83998056     | Application |               | 8/11/2014   |            | PCT/US2014/050541  | PCT | PRIORITIZING AT LEAST ONE FLOW CLASS FOR AN APPLICATION ON A SOFTWARE DEFINED NETWORKING CONTROLLER        |
| 84033648     | Application |               | 10/29/2014  |            | PCT/US2014/062865  | PCT | PREVENTING FLOW/ TABLE MISSES IN A SOFTWARE DEFINED NETWORK                                                |
| 84097764     | Application |               | 11/5/2014   |            | PCT/US2014/064058  | PCT | DYNAMICALLY INCLUDING AN ACTIVE TUNNEL AS A MEMBER OF A VIRTUAL NETWORK                                    |
| 84111956     | Application |               | 5/15/2015   |            | PCT/US2015/031094  | PCT | MAXIMUM TRANSMISSION UNIT INSTALLATION FOR NETWORK TRAFFIC ALONG A DATAPATH IN A SOFTWARE DEFINED NETWORK  |
| 90039605     | Application |               | 8/31/2015   |            | PCT/US2015/047712  | PCT | REDIRECTING A PRINT JOB                                                                                    |
| 83764251     | Application |               | 1/27/2014   |            | PCT/US2014/013197  | PCT | CONTROL CHANNEL USAGE MONITORING IN A SOFTWARE-DEFINED NETWORK                                             |
| 83957335     | Application |               | 41851       |            | PCT/US2014/049099  | PCT | Voltage Regulation for Battery Strings                                                                     |
| 84031378     | Application |               | 41943       |            | PCT/US2014/063556  | PCT | REMOVABLE TEST AND DIAGNOSTICS CIRCUIT                                                                     |
| 84031438     | Application |               | 11/12/2014  |            | PCT/US2014/065222  | PCT | SHARED BACKUP POWER SELF-REFRESH MODE                                                                      |
| 84033482     | Application |               | 1/28/2015   |            | PCT/US2015/013213  | PCT | SERVER NODE SHUTDOWN                                                                                       |
| 84042845     | Application |               | 12/2/2014   |            | PCT/US2014/068239  | PCT | MEMORY MODULE PERSISTENT DATA BACK-UPS                                                                     |
| 84256899     | Application |               | 7/31/2015   |            | PCT/US2015/043311  | PCT | BACKUP POWER COMMUNICATION                                                                                 |
| 84262913     | Application |               | 7/30/2015   |            | PCT/US2015/042914  | PCT | POWER MODULE HEALTH TEST                                                                                   |
| 90031470     | To Be Filed |               |             |            |                    | PCT | ACTIVATION OF A SWITCH TO INCREASE DUTY CYCLE                                                              |
| 90035237     | Application |               | 9/29/2015   |            | PCT/US2015/052936  | PCT | Variable E-fuse Soft Start Protection                                                                      |
| 83826077     | Application |               | 7/31/2014   |            | PCT/US2014/049320  | PCT | SERVER TRAY BACKUP POWER REDUNDANCY                                                                        |
| 84031146     | Application |               | 2/13/2015   |            | PCT/US2015/015890  | PCT | AIR AND FLUID COOLING OF A DATA CENTER                                                                     |
| 84114976     | Application |               | 1/31/2015   |            | PCT/US2015/014007  | PCT | COOLANT DISTRIBUTION UNIT                                                                                  |
| 84172992     | Application |               | 3/24/2015   |            | PCT/US2015/022246  | PCT | MEMORY COOLING PAD                                                                                         |
| 83953565     | Application |               | 9/30/2014   |            | PCT/US2014/058377  | PCT | LIQUID COOLING WITH A COOLING CHAMBER                                                                      |
| 83958065     | Application |               | 9/24/2014   |            | PCT/US2014/057148  | PCT | ARTIFACT PROTECTION                                                                                        |
|              |             |               |             |            |                    | PCT | ASSIGNING A DOCUMENT TO PARTIAL MEMBERSHIP IN COMMUNITIES                                                  |

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| 84111458     | Application  |               | 1/30/2015   |            | PCT/US2015/013705  | PCT | Dynamic Modulation for Near Eye Display                                 |
| 84262647     | Application  |               | 6/26/2015   |            | PCT/CN2015/000467  | PCT | MOBILE DEVICE LOCATOR                                                   |
| 83269857     | Published    |               | 8/27/2013   |            | PCT/US2013/056711  | PCT | MANAGEMENT ACTIONS FOR CALENDAR CONFLICTS                               |
| 83960930     | Application  |               | 7/30/2014   |            | PCT/US2014/048829  | PCT | PRODUCT RISK PROFILE                                                    |
| 84031484     | Application  |               | 41947       |            | PCT/US2014/063837  | PCT | WEB SERVICES GENERATION BASED ON CLIENT-SIDE CO                         |
| 84113373     | Application  |               | 42058       |            | PCT/US2015/017016  | PCT | NAVIGATION MENU BASED ON CROWD DATA                                     |
| 83273366     | Published    |               | 7/31/2013   |            | PCT/US2013/052891  | PCT | Coating Magnetic Tape Heads                                             |
| 83705290     | Application  |               | 12/6/2013   |            | PCT/US2013/073591  | PCT | Replicating Metadata Associated with a File                             |
| 83713588     | Application  |               | 12/6/2013   |            | PCT/US2013/073616  | PCT | FILE RETENTION                                                          |
| 83777601     | Published    |               | 3/5/2014    |            | PCT/US2014/020937  | PCT | Processing Primary Key Modifications                                    |
| 84031512     | Application  |               | 9/30/2014   |            | PCT/US2014/058286  | PCT | AN OVERLAY STREAM OF OBJECTS                                            |
| 84080958     | Application  |               | 12/1/2014   |            | PCT/US2014/067945  | PCT | DISTRIBUTED SEGMENTED FILE SYSTEMS                                      |
| 84141396     | Application  |               | 1/20/2015   |            | PCT/US2015/012057  | PCT | Secure File Deletion                                                    |
| 84173690     | Application  |               | 7/16/2015   |            | PCT/US2015/040722  | PCT | DISTRIBUTED FILE SYSTEM WITH TENANT FILE SYSTEM ENTIT                   |
| 84191111     | Application  |               | 3/23/2015   |            | PCT/US2015/022064  | PCT | Database Management                                                     |
| 84200600     | Application  |               | 3/26/2015   |            | PCT/US2015/022793  | PCT | CHARGING A USER'S STORAGE QUOTA FOR EXTENDED ATTRIBUTES                 |
| 84113925     | Application  |               | 1/30/2015   |            | PCT/US2015/013864  | PCT | SECURE API COMMUNICATION                                                |
| 84149030     | Application  |               | 3/25/2015   |            | PCT/US2015/022384  | PCT | DEMAND FORECASTING AND SIMULATION                                       |
| 83957698     | Application  |               | 7/31/2014   |            | PCT/US2014/049069  | PCT | NEXT GENERATION FORM FACTOR (NGFF) CARRIER                              |
| 83958889     | Application  |               | 7/31/2014   |            | PCT/US2014/049306  | PCT | Backup Power Assembly Having Blind Mate Connector                       |
| 84113218     | Application  |               | 12/17/2014  |            | PCT/US2014/070830  | PCT | DISABLING DEVICE INCLUDING ADHESIVE TO DISABLE AN ELECTRICAL INTERFACE  |
| 84171400     | Application  |               | 4/3/2015    |            | PCT/US2015/024329  | PCT | CONNECTOR MOUNTS                                                        |
| 84173006     | Application  |               | 4/17/2015   |            | PCT/US2015/026465  | PCT | RACK ENCLOSURE WITH PERFORATIONS FOR COOLING                            |
| 84262950     | Application  |               | 7/30/2015   |            | PCT/US2015/042886  | PCT | Transceiver Module                                                      |
| 84263016     | Application  |               | 9/30/2015   |            | PCT/US2015/053089  | PCT | POSITIONABLE COVER TO SET COOLING SYSTEM                                |
| 90033923     | Application  |               | 8/28/2015   |            | PCT/US2015/047552  | PCT | TRAYS TO RECEIVE STORAGE DEVICES                                        |
| 90035297     | Acknowledged |               |             |            |                    | PCT | RISC (Rack-integrated secondary cooling) plenums                        |
| 84260119     | Acknowledged |               |             |            |                    | PCT | Flush-set accounting in CPU caches, home agents, and memory controllers |
| 83273360     | Published    |               | 7/29/2013   |            | PCT/US2013/052541  | PCT | Metadata Extraction, Processing, and Loading                            |
| 83735131     | Published    |               | 1/23/2014   |            | PCT/US2014/012784  | PCT | Volume Migration For A Storage Area Network                             |
| 83777627     | Published    |               | 2/14/2014   |            | PCT/US2014/016627  | PCT | OBJECT BASED PERSISTENT MAIN MEMORY                                     |
| 83820100     | Application  |               | 6/30/2014   |            | PCT/US2014/044853  | PCT | RUNTIME DRIVE DETECTION AND CONFIGURATION                               |
| 83856416     | Application  |               | 3/20/2014   |            | PCT/US2014/031347  | PCT | Data Source and Destination Timestamps                                  |
| 84031412     | Application  |               | 10/31/2014  |            | PCT/US2014/063333  | PCT | PROVIDING STORAGE AREA NETWORK FILE SERVICES                            |
| 84111761     | Application  |               | 4/2/2015    |            | PCT/US2015/024159  | PCT | PAGE CACHE ON PERSISTENT MEMORY                                         |

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| 84113052     | Application |               | 1/27/2015   |            | PCT/US2015/013087  | PCT | VIRTUAL MACHINE PLACEMENT                                                                                                |
| 84113968     | Application |               | 42034       |            | PCT/US2015/013923  | PCT | TRANSMISSION OVER SCSI PROTOCOL                                                                                          |
| 84171552     | Application |               | 6/26/2015   |            | PCT/US2015/037905  | PCT | CARRIER FRAMES                                                                                                           |
| 90034172     | Application |               | 42244       |            | PCT/US2015/047388  | PCT | Recovering From an Origination Node Failure During an Asynchronous Replication                                           |
| 90035171     | To Be Filed |               |             |            |                    | PCT | Method to reduce a storage device power consumption and temperature by means of a storage controller throttling workload |
|              |             |               |             |            |                    |     |                                                                                                                          |
| 83268600     | Published   |               | 9/30/2013   |            | PCT/US2013/062635  | PCT | STACKING NETWORK SWITCHES                                                                                                |
| 83820080     | Application |               | 3/27/2014   |            | PCT/US2014/032066  | PCT | MODULAR INPUT/OUTPUT AGGREGATION ZONE                                                                                    |
| 84036530     | Application |               | 11/3/2014   |            | PCT/US2014/063702  | PCT | DETERMINING RELIABILITY OF A COMPUTER CARD                                                                               |
| 84112763     | Application |               | 12/1/2014   |            | PCT/US2014/067935  | PCT | AUTO-NEGOTIATION OVER EXTENDED BACKPLANE                                                                                 |
| 84170341     | Application |               | 4/30/2015   |            | PCT/US2015/028625  | PCT | DUAL-PORT NON-VOLATILE DUAL IN-LINE MEMORY MODULES                                                                       |
|              |             |               |             |            |                    |     |                                                                                                                          |
| 84260079     | Application |               | 7/31/2015   |            | PCT/US2015/043288  | PCT | LEAKAGE DETECTION FOR A LOGIC BOARD                                                                                      |
| 84260099     | Application |               | 7/27/2015   |            | PCT/US2015/042315  | PCT | SOCKET TO SUPPORT BOARDS IN A SPACED RELATION                                                                            |
| 84262283     | Application |               | 7/31/2015   |            | PCT/US2015/043131  | PCT | A NETWORKING INFRASTRUCTURE CENTER                                                                                       |
| 84264616     | Application |               | 8/14/2015   |            | PCT/US2015/045424  | PCT | OPTICAL SIGNALS                                                                                                          |
| 90031066     | To Be Filed |               |             |            |                    | PCT | A method of Zero-Downtime Failover to known-good snapshot when a switch underperforms                                    |
|              |             |               |             |            |                    |     |                                                                                                                          |
| 83588897     | Published   |               | 12/4/2013   |            | PCT/US2013/073130  | PCT | POLICY RULE BASED ON A REQUESTED BEHAVIOR                                                                                |
| 83271591     | Published   |               | 41535       |            | PCT/IN2013/000565  | PCT | Monitoring Network Performance Characteristics                                                                           |
| 83273947     | Published   |               | 9/16/2013   |            | PCT/US2013/059880  | PCT | MULTI-VIRTUALIZATION SCHEME SELECTION                                                                                    |
| 83733760     | Application |               | 3/24/2014   |            | PCT/US2014/031577  | PCT | CLIENT-BASED PORT FILTER TABLE                                                                                           |
| 83735234     | Published   |               | 1/29/2014   |            | PCT/US2014/013504  | PCT | NETWORK PROGRAMMING                                                                                                      |
| 83766532     | Application |               | 5/13/2014   |            | PCT/US2014/037892  | PCT | NETWORK ACCESS CONTROL AT CONTROLLER                                                                                     |
| 83822553     | Application |               | 4/29/2014   |            | PCT/IN2014/000287  | PCT | Network Service Insertion                                                                                                |
| 84033470     | Application |               | 1/19/2015   |            | PCT/IN2015/000030  | PCT | ENGINES TO PRUNE OVERLAY NETWORK TRAFFIC                                                                                 |
| 84033599     | Application |               | 10/31/2014  |            | PCT/US2014/063310  | PCT | DISTRIBUTED SYSTEM PARTITION                                                                                             |
| 84035405     | Application |               | 10/30/2014  |            | PCT/US2014/063190  | PCT | OWNER NODE FOR RING NETWORK                                                                                              |
| 84172714     | Application |               | 3/27/2015   |            | PCT/US2015/023174  | PCT | ACCESSING A SHARED RESOURCE                                                                                              |
| 84264115     | Application |               | 42202       |            | PCT/US2015/041024  | PCT | Content Addressable Memory                                                                                               |
| 84264135     | To Be Filed |               |             |            |                    | PCT | A Flexible Hash Architecture for a lookup resource in network switches.                                                  |
|              |             |               |             |            |                    |     |                                                                                                                          |
| 83269184     | Published   |               | 11/8/2013   |            | PCT/US2013/069202  | PCT | COORDINATION OF CHANNEL SCANNING AMONG MULTIPLE RADIOS                                                                   |
|              |             |               |             |            |                    |     |                                                                                                                          |
| 83588828     | Published   |               | 9/27/2013   |            | PCT/US2013/062416  | PCT | MANAGING MULTICAST TRANSMISSIONS                                                                                         |
| 83777458     | Published   |               | 1/27/2014   |            | PCT/US2014/013142  | PCT | RADIO BAND ASSIGNMENT                                                                                                    |
| 84033427     | Application |               | 2/13/2015   |            | PCT/US2015/015793  | PCT | NETWORK DEVICE REGISTRATION                                                                                              |

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| 83211159     | Published   |               | 5/16/2013   |            | PCT/US2013/041350  | PCT | DEDUPICATED DATA STORAGE SYSTEM HAVING DISTRIBUTED MANIFEST                                                                                                                  |
| 83928790     | Application |               | 7/2/2014    |            | PCT/US2014/045204  | PCT | MANAGING PORT CONNECTIONS                                                                                                                                                    |
| 83928796     | Application |               | 9/5/2014    |            | PCT/US2014/054174  | PCT | DATA STORAGE OVER FIBRE CHANNEL                                                                                                                                              |
| 83961259     | Application |               | 5/29/2014   |            | PCT/US2014/039903  | PCT | BACKUP STORAGE                                                                                                                                                               |
| 84027771     | Application |               | 8/29/2014   |            | PCT/US2014/053507  | PCT | DATA DEDUPICATION                                                                                                                                                            |
| 84029869     | Application |               | 8/28/2014   |            | PCT/US2014/053158  | PCT | MOVING DATA CHUNKS                                                                                                                                                           |
| 84031535     | Application |               | 11/11/2014  |            | PCT/US2014/064957  | PCT | Balancing Thread Groups                                                                                                                                                      |
| 84034655     | Application |               | 42034       |            | PCT/US2015/013761  | PCT | DATA ENCRYPTION                                                                                                                                                              |
| 84172800     | Application |               | 5/15/2015   |            | PCT/US2015/030937  | PCT | DELETION PRIORITIZATION                                                                                                                                                      |
| 83623395     | Published   |               | 10/30/2013  |            | PCT/US2013/067627  | PCT | APPLICATION PROGRAMMABLE INTERFACE (API) DISCOVERY                                                                                                                           |
| 83954332     | Application |               | 9/17/2014   |            | PCT/US2014/056052  | PCT | USER INTERFACE LAYOUT COMPARISON                                                                                                                                             |
| 84029972     | Application |               | 11/26/2014  |            | PCT/US2014/067600  | PCT | STATE VALUE INDEXING INTO AN ACTION DATABASE                                                                                                                                 |
| 83734733     | Published   |               | 12/18/2013  |            | PCT/US2013/076313  | PCT | DATA BLOCK TRANSMISSION                                                                                                                                                      |
| 83602943     | Published   |               | 1/31/2014   |            | PCT/US2014/014275  | PCT | ENCRYPTED IN-PLACE OPERATING SYSTEM MIGRATION                                                                                                                                |
| 83623484     | Published   |               | 10/30/2013  |            | PCT/US2013/067534  | PCT | ASSIGNING RESOURCE PERMISSIONS                                                                                                                                               |
| 83960054     | Application |               | 7/31/2014   |            | PCT/US2014/049152  | PCT | REMEDIATING A SECURITY THREAT TO A NETWORK                                                                                                                                   |
| 84170178     | Application |               | 4/29/2015   |            | PCT/US2015/028250  | PCT | COMPLIANCE AND GOVERNANCE POLICY PROPAGATION                                                                                                                                 |
| 84279701     | Application |               | 7/22/2015   |            | PCT/CN2015/084761  | PCT | This is a new approach for a high secure and flexible all-in-one card solution for shops of retail industry. It uses NFC, Secure Element, cryptography technology and so on. |
| 90037787     | Application |               | 8/31/2015   |            | PCT/US2015/047691  | PCT | COLLECTING DOMAIN NAME SYSTEM TRAFFIC                                                                                                                                        |
| 83668201     | Published   |               | 10/22/2013  |            | PCT/US2013/066089  | PCT | INTERACTIVE OPTICAL CODES                                                                                                                                                    |
| 83735675     | Application |               | 3/28/2014   |            | PCT/IN2014/000199  | PCT | Data File Hoarding                                                                                                                                                           |
| 84264639     | To Be Filed |               | 7/8/2015    |            |                    | PCT | LOCATION OF OBJECT WITHIN NETWORK OF OBJECTS                                                                                                                                 |
| 90037066     | To Be Filed |               |             |            |                    | PCT | A method to create adaptive request management by altering the maximum read size in extremely concurrent big data environments for improved query cache hits.                |
| 83635363     | Published   |               | 10/31/2013  |            | PCT/CN2013/086289  | PCT | PRE-POPULATING A FORM                                                                                                                                                        |
| 83640421     | Published   |               | 10/29/2013  |            | PCT/US2013/067208  | PCT | END USER TREND IDENTIFICATION TO IDENTIFY INFORMATION GAPS                                                                                                                   |
| 83862078     | Application |               | 3/28/2014   |            | PCT/US2014/032257  | PCT | SYSTEMS AND METHODS FOR PROVIDING AN INFORMATION TECHNOLOGY INTERFACE                                                                                                        |
| 90039725     | To Be Filed |               |             |            |                    | PCT | "What-Where-When" paradigm for supporting better background job execution in modern multi-tenant applications.                                                               |

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| 83271869     | Published   |               | 6/7/2013    |            | PCT/US2013/044691  | PCT | PRIORITIZING LOG MESSAGES                                                                                                                                                                       |
| 83272304     | Published   |               | 6/7/2013    |            | PCT/US2013/044705  | PCT | IDENTIFYING LOG MESSAGES                                                                                                                                                                        |
| 83618635     | Application |               | 2/11/2014   |            | PCT/US2014/015694  | PCT | CLIENT APPLICATION PROFILING                                                                                                                                                                    |
| 83776270     | Published   |               | 2/12/2014   |            | PCT/US2014/015978  | PCT | MONITORING A COMPUTING ENVIRONMENT                                                                                                                                                              |
| 83966543     | Application |               | 6/4/2014    |            | PCT/US2014/040903  | PCT | EVALUATING USER EXPERIENCE                                                                                                                                                                      |
| 84031429     | Application |               | 9/25/2014   |            | PCT/US2014/057544  | PCT | A REPORT COMPRISING A MASKED VALUE                                                                                                                                                              |
| 84031452     | Application |               | 9/8/2014    |            | PCT/US2014/054478  | PCT | USER INTERFACE COMPONENTS LOAD TIME VISUALIZATION                                                                                                                                               |
| 84031492     | Application |               | 12/16/2014  |            | PCT/US2014/070616  | PCT | IDENTIFICATION OF A SET OF OBJECTS BASED ON A FOCUS ON                                                                                                                                          |
| 84173238     | Application |               | 42200       |            | PCT/US2015/040542  | PCT | OBJECT                                                                                                                                                                                          |
| 83820415     | Application |               | 5/27/2014   |            | PCT/US2014/039513  | PCT | DETERMINING SEVERITY OF APPLICATION CRASHES                                                                                                                                                     |
| 84030533     | Application |               | 1/29/2015   |            | PCT/US2015/013465  | PCT | RESPONSE BASED ON BROWSER ENGINE                                                                                                                                                                |
| 8413075      | Application |               | 4/30/2015   |            | PCT/US2015/028485  | PCT | DEFECT REPORTING IN APPLICATION TESTING                                                                                                                                                         |
| 8413235      | Application |               | 42033       |            | PCT/US2015/013587  | PCT | MAPPING NODES IN A NETWORK                                                                                                                                                                      |
| 84262744     | Application |               | 8/18/2015   |            | PCT/US2015/045378  | PCT | GPS Computation Cycling                                                                                                                                                                         |
| 84262801     | Application |               | 8/14/2015   |            | PCT/US2015/045378  | PCT | USER INTERFACE BEHAVIOR BASED RULES GENERATION                                                                                                                                                  |
| 84265094     | Application |               | 7/30/2015   |            | PCT/CN2015/085581  | PCT | DYNAMIC BUILD PIPELINE EXECUTION                                                                                                                                                                |
| 90027139     | To Be Filed |               |             |            |                    | PCT | Automatic evaluation of test implementation based on coverage and efficiency of assertions compared to definition of application under test                                                     |
| 90035331     | Application |               | 9/18/2015   |            | PCT/US2015/050970  | PCT | Software management scoring system- A system that scores how good you manage your software development processes, predicts your score and help you to improve it during the process management. |
| 83234153     | Published   |               | 4/19/2013   |            | PCT/US2013/037354  | PCT | APPLICATION SESSION ANALYSIS AND RECOMMENDATION SYSTEM                                                                                                                                          |
| 83278298     | Application |               | 7/31/2013   |            | PCT/US2013/052983  | PCT | Unused Parameters of Application Under Test                                                                                                                                                     |
| 83833250     | Application |               | 3/24/2014   |            | PCT/US2014/031569  | PCT | SIGNAL TOKENS INDICATIVE OF MALWARE                                                                                                                                                             |
| 83952454     | Application |               | 9/4/2014    |            | PCT/US2014/053992  | PCT | MONITORING FOR AUTHENTICATION INFORMATION                                                                                                                                                       |
| 83272324     | Published   |               | 9/4/2013    |            | PCT/US2013/058014  | PCT | DETERMINE PROTECTIVE MEASURE FOR DATA THAT MEETS CRITERIA                                                                                                                                       |
| 83272347     | Published   |               | 9/4/2013    |            | PCT/US2013/058043  | PCT | PROVIDING RESOURCES TO CUSTOMERS VIA NODE-RELATIONSHIP MODELS                                                                                                                                   |
| 83272530     | Published   |               | 10/30/2013  |            | PCT/US2013/067574  | PCT | PROVIDING SERVICES AS RESOURCES FOR OTHER SERVICES                                                                                                                                              |
| 83272570     | Published   |               | 10/30/2013  |            | PCT/US2013/067513  | PCT | FACILITATING AUTONOMOUS COMPUTING WITHIN A CLOUD SERVICE                                                                                                                                        |
|              |             |               |             |            |                    | PCT | MONITORING A CLOUD SERVICE MODELED AS A TOPOLOGY                                                                                                                                                |

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| 83668138     | Published   |               | 10/31/2013  |            | PCT/US2013/067870  | PCT | AGGREGATING, PRESENTING AND FULFILLING A NUMBER OF CATALOGS                                                                          |
| 83748573     | Application |               | 6/12/2014   |            | PCT/US2014/042111  | PCT | DETERMINING APPLICATION DEPLOYMENT RECOMMENDATIONS                                                                                   |
| 83954910     | Application |               | 7/24/2014   |            | PCT/US2014/048063  | PCT | END POINT IDENTIFICATION                                                                                                             |
| 84152837     | Application |               | 42185       |            | PCT/US2015/038545  | PCT | CLOUD SERVICE RATING                                                                                                                 |
| 84262993     | Application |               | 6/5/2015    |            | PCT/US2015/034472  | PCT | Managing Cost Related to Usage of Cloud Resources                                                                                    |
| 83862722     | Application |               | 3/27/2014   |            | PCT/EP2014/056239  | PCT | SCHEDULING DOWNLOADS                                                                                                                 |
| 84114449     | Instructed  |               |             |            |                    | PCT | Seamless switching of HLR Traffic due to inadequate resources.                                                                       |
| 84114469     | Application |               | 1/29/2015   |            | PCT/US2015/013467  | PCT | REGISTRATION OVERRIDE                                                                                                                |
| 84114615     | Application |               | 1/30/2015   |            | PCT/US2015/013848  | PCT | COMMUNICATION USING VIRTUAL NUMBERS                                                                                                  |
| 90032045     | To Be Filed |               |             |            |                    | PCT | Social Media Portal (app) Based Caching                                                                                              |
| 90068693     | To Be Filed |               |             |            |                    | PCT | DISTRIBUTED EVENT PROCESSING                                                                                                         |
| 83953539     | Application |               | 6/6/2014    |            | PCT/US2014/041300  | PCT | ACTION EXECUTION BASED ON MANAGEMENT CONTROLLER ACTION REQUEST                                                                       |
| 84114692     | Application |               | 1/22/2015   |            | PCT/US2015/012547  | PCT | FAST PROXIMITY DETECTION                                                                                                             |
| 84115004     | Application |               | 1/29/2015   |            | PCT/US2015/013422  | PCT | TEST GENERATION FOR BROWSER-BASED USER INTERFACE                                                                                     |
| 84263056     | To Be Filed |               |             |            |                    | PCT | Compliance Checking a ConvergedSystem by layering on top of the objects of a management appliance                                    |
| 83777355     | Application |               | 1/29/2014   |            | PCT/US2014/013534  | PCT | DUMPING RESOURCES                                                                                                                    |
| 84262303     | Instructed  |               |             |            |                    | PCT | Concurrency Testing                                                                                                                  |
| 90037996     | To Be Filed |               |             |            |                    | PCT | System and method for proximity assembled provisioning of OS volumes                                                                 |
| 83209702     | Published   |               | 5/10/2013   |            | PCT/US2013/040524  | PCT | TUPLE RECOVERY                                                                                                                       |
| 83267804     | Published   |               | 41530       |            | PCT/US2013/059588  | PCT | Failure Recovery of a Task State in Batch-Based Stream Processing                                                                    |
| 83598071     | Published   |               | 12/19/2013  |            | PCT/US2013/076538  | PCT | RESIDUAL DATA IDENTIFICATION                                                                                                         |
| 83598111     | Published   |               | 12/5/2013   |            | PCT/US2013/073249  | PCT | REGULAR EXPRESSION MATCHING                                                                                                          |
| 83776625     | Published   |               | 41668       |            | PCT/US2014/013531  | PCT | FORCE FEEDBACK                                                                                                                       |
| 83776671     | Published   |               | 1/31/2014   |            | PCT/US2014/014222  | PCT | PIXEL-BASED VISUALIZATION OF EVENT METRIC FLUCTUATION                                                                                |
| 83819934     | Application |               | 4/18/2014   |            | PCT/US2014/034647  | PCT | PROVIDING COMBINED DATA FROM A CACHE AND A STORAGE DEVICE                                                                            |
| 83825639     | Application |               | 4/30/2014   |            | PCT/US2014/036154  | PCT | Visual Exploration of High Dimensional Spaces by Selecting Dimensions using Attribute Dissimilar Measure and Expert Domain Knowledge |

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| 83957260     | Application  |               | 4/18/15     |            | PCT/US2014/048292  | PCT | SOFTWARE-DEFINED SENSING                                                                                                     |
| 84005733     | Application  |               | 7/28/2014   |            | PCT/US2014/048501  | PCT | Memory Access Control                                                                                                        |
| 84036616     | Application  |               | 4/19/15     |            | PCT/CN2014/093670  | PCT | SCALABLE WEB DATA EXTRACTION                                                                                                 |
| 84114841     | Application  |               | 4/20/15     |            | PCT/US2015/019014  | PCT | MULTI-LEVEL OBJECT RE-IDENTIFICATION                                                                                         |
| 84115837     | Application  |               | 1/30/2015   |            | PCT/US2015/013897  | PCT | UPDATES TO A PREDICTION MODEL USING STATISTICAL ANALYSIS GROUPS                                                              |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 84171446     | Application  |               | 4/30/2015   |            | PCT/US2015/028668  | PCT | IDENTIFYING GROUPS                                                                                                           |
| 84171466     | Application  |               | 4/29/2015   |            | PCT/US2015/028235  | PCT | INCREMENTALLY UPDATING A DATABASE STATISTIC                                                                                  |
| 84171489     | Application  |               | 2/24/2015   |            | PCT/US2015/017296  | PCT | USING FUZZY INFERENCE TO DETERMINE LIKELIHOOD THAT FINANCIAL ACCOUNT SCENARIO IS ASSOCIATED WITH ILLEGAL ACTIVITY            |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 84261516     | Application  |               | 6/26/2015   |            | PCT/CN2015/082504  | PCT | SOCIAL INFLUENCE DETERMINATION                                                                                               |
| 84262867     | Application  |               | 8/21/2015   |            | PCT/US2015/046222  | PCT | INTERACTIVE ANALYTICS ON TIME SERIES DATA                                                                                    |
| 84262884     | Application  |               | 6/23/2015   |            | PCT/US2015/037206  | PCT | RECOMMENDING ANALYTIC TASKS BASED ON SIMILARITY OF DATASETS                                                                  |
| 90036960     | Acknowledged |               |             |            |                    | PCT | Recommender Systems by Collaborative Filtering Using information Theory                                                      |
| 90037106     | To Be Filed  |               |             |            |                    | PCT | A method for identifying information type of data attributes and associated data treatment choices from a sample of the data |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 90037249     | Acknowledged |               |             |            |                    | PCT | Isolation Context Programming Model                                                                                          |
| 83205145     | Published    |               | 6/20/2013   |            | PCT/US2013/046804  | PCT | RESOURCE CLASSIFICATION USING RESOURCE REQUESTS                                                                              |
| 83832795     | Application  |               | 4/25/2014   |            | PCT/EP2014/058525  | PCT | Bridgebuilder: Multiplex Link Prediction Across Multiplex Networks                                                           |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 83958720     | Application  |               | 7/30/2014   |            | PCT/US2014/048872  | PCT | KEY SEARCH TOKEN FOR ENCRYPTED DATA                                                                                          |
| 84111904     | Application  |               | 11/28/2014  |            | PCT/US2014/067818  | PCT | VERIFYING NETWORK ELEMENTS                                                                                                   |
| 84173630     | Application  |               | 6/5/2015    |            | PCT/US2015/034393  | PCT | REMOTE ATTESTATION OF A NETWORK ENDPOINT DEVICE                                                                              |
| 84264782     | Application  |               | 7/31/2015   |            | PCT/EP2015/067732  | PCT | CATEGORY BASED EXECUTION SCHEDULING                                                                                          |
| 84265652     | Application  |               | 9/24/2015   |            | PCT/EP2015/072044  | PCT | MEMORY SYSTEM MANAGEMENT                                                                                                     |
| 84265675     | Application  |               | 7/27/2015   |            | PCT/EP2015/067172  | PCT | SCHEDULING HETEROGENOUS PROCESSORS                                                                                           |
| 90035088     | Acknowledged |               |             |            |                    | PCT | Hardware Support for Efficient Bulk Zeroing in NVM-based Systems                                                             |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 84260185     | Application  |               | 4/21/15     |            | PCT/US2015/038555  | PCT | PARTITIONING A WORKFLOW                                                                                                      |
| 83266061     | Published    |               | 4/14/15     |            | PCT/US2013/048120  | PCT | Memory Bus Error Signal                                                                                                      |
| 83602751     | Published    |               | 4/16/17     |            | PCT/US2013/073871  | PCT | MEMORY ERASURE INFORMATION IN CACHE LINES                                                                                    |
| 83756960     | Published    |               | 4/16/10     |            | PCT/US2014/014046  | PCT | MEMORY CELL HAVING RESISTIVE AND CAPACITIVE STORAGE ELEMENTS                                                                 |
|              |              |               |             |            |                    |     |                                                                                                                              |
| 83757753     | Published    |               | 1/31/2014   |            | PCT/US2014/014185  | PCT | UNIFYING MEMORY CONTROLLER                                                                                                   |
| 84030055     | Application  |               | 12/12/2014  |            | PCT/US2014/069973  | PCT | DETERMINING RESTING TIMES FOR MEMORY BLOCKS                                                                                  |

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| 84033181     | Application  |               | 10/29/2014  |            | PCT/US2014/062912  | PCT | RESISTIVE MEMORY DEVICE                                                                                                    |
| 84111741     | Application  |               | 1/30/2015   |            | PCT/US2015/013921  | PCT | DETERMINE FAILED COMPONENTS IN FAULT-TOLERANT MEMORY                                                                       |
| 84112783     | Application  |               | 1/27/2015   |            | PCT/US2015/013124  | PCT | CORRECTING ERRORS OF A VARIABLE DATA PAYLOAD                                                                               |
| 84170278     | Application  |               | 4/29/2015   |            | PCT/US2015/028256  | PCT | COMMUNICATION INTERFACE MEMORY DEVICE                                                                                      |
| 84260202     | Application  |               | 42265       |            | PCT/US2015/051070  | PCT | MEMORY PERSISTENCE FROM A VOLATILE MEMORY TO NON-VOLATILE MEMORY                                                           |
| 84262426     | Application  |               | 5/29/2015   |            | PCT/US2015/033297  | PCT | MEMRISTANCE FEEDBACK TUNING                                                                                                |
| 90037956     | Application  |               | 42277       |            | PCT/US2015/053085  | PCT | REMAPPING OPERATIONS                                                                                                       |
| 90037976     | To Be Filed  |               |             |            |                    | PCT | RAID Rebuild in a High Availability, Fault Tolerant System with a Plurality of RAID controllers and Memory-Storage Devices |
|              |              |               |             |            |                    |     |                                                                                                                            |
| 83205228     | Published    |               | 5/31/2013   |            | PCT/US2013/043520  | PCT | INFLUENCE SCORE OF A BRAND                                                                                                 |
| 84030828     | Application  |               | 10/31/2014  |            | PCT/US2014/063531  | PCT | PROJECTIONS DETERMINATION FOR COLUMN-BASED DATABASES                                                                       |
| 83957930     | Application  |               | 6/26/2014   |            | PCT/US2014/044337  | PCT | GENERATING SPECIFICATIONS FOR AN ORTHOSIS                                                                                  |
| 84029992     | Application  |               | 11/14/2014  |            | PCT/US2014/065781  | PCT | VIBRATION NOTIFICATIONS RECEIVED FROM VIBRATION SENSORS                                                                    |
| 83680561     | Published    |               | 12/3/2013   |            | PCT/US2013/072819  | PCT | SECURITY ACTION OF NETWORK PACKET BASED ON SIGNATURE AND REPUTATION                                                        |
| 83270011     | Application  |               | 8/28/2013   |            | PCT/US2013/056947  | PCT | DISTRIBUTED PATTERN DISCOVERY                                                                                              |
| 84113095     | Application  |               | 1/30/2015   |            | PCT/US2015/013885  | PCT | COLLABRATIVE INVESTIGATION OF SECURITY INDICATORS                                                                          |
| 83602837     | Published    |               | 9/26/2013   |            | PCT/US2013/061838  | PCT | Subnetworks of Peer to Peer Networks                                                                                       |
| 83607374     | Published    |               | 9/26/2013   |            | PCT/US2013/061888  | PCT | Peer Nodes in Peer to Peer Networks                                                                                        |
| 83747634     | Published    |               | 12/16/2013  |            | PCT/US2013/075395  | PCT | FIRMWARE AUTHENTICATION                                                                                                    |
| 84264825     | Application  |               | 8/11/2015   |            | PCT/US2015/044612  | PCT | DISTRIBUTE EXECUTION OF USER-DEFINED FUNCTION                                                                              |
| 83272361     | Published    |               | 41424       |            | PCT/US2013/043457  | PCT | VIRTUAL MOBILE PHONE INTERFACE SYSTEM AND METHOD THEREOF                                                                   |
| 84039753     | Application  |               | 41887       |            | PCT/US2014/054428  | PCT | Vertical Service Model                                                                                                     |
| 84115817     | Application  |               | 3/10/2015   |            | PCT/US2015/019786  | PCT | RESOURCE PROVISIONING FOR MULTIPLE USER DATA STORAGE AND SEPARATION                                                        |
| 84170135     | Application  |               | 4/14/2015   |            | PCT/US2015/025768  | PCT | RESOURCE BROKERING FOR MULTIPLE USER DATA STORAGE AND SEPARATION                                                           |
| 84170158     | Application  |               | 3/30/2015   |            | PCT/US2015/023276  | PCT | APPLICATION ANALYZER FOR CLOUD COMPUTING                                                                                   |
| 84251735     | To Be Filed  |               |             |            |                    | PCT | DATA TRANSFER REQUESTS                                                                                                     |
| 84263594     | Application  |               | 7/31/2015   |            | PCT/US2015/043232  | PCT | Federated Marketplace Portal                                                                                               |
| 90035191     | Acknowledged |               |             |            |                    | PCT | DYNAMIC CLASSIFICATION OF DIGITAL FILES                                                                                    |
| 84170490     | Application  |               | 4/14/2015   |            | PCT/US2015/025805  | PCT | PENETRATION DETECTION BOUNDARY HAVING A HEAT SINK                                                                          |

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| 83213240     | Published    |               | 7/25/2013   |            | PCT/US2013/052050  | PCT | RESISTIVE MEMORY DEVICE HAVING FIELD ENHANCED FEATURES                                               |
| 83623504     | Application  |               | 12/13/2013  |            | PCT/US2013/074997  | PCT | V-SHAPE RESISTIVE MEMORY ELEMENT                                                                     |
| 83763830     | Published    |               | 1/30/2014   |            | PCT/US2014/013957  | PCT | NONLINEAR DIELECTRIC STACK CIRCUIT ELEMENT                                                           |
| 83822699     | Application  |               | 5/30/2014   |            | PCT/US2014/040115  | PCT | MEMORY CONTROLLERS                                                                                   |
| 83953098     | Application  |               | 7/30/2014   |            | PCT/US2014/048800  | PCT | CURRENT BEHAVIOR OF ELEMENTS                                                                         |
| 83957887     | Application  |               | 7/28/2014   |            | PCT/US2014/048448  | PCT | MEMRISTOR CELL READ MARGIN ENHANCEMENT                                                               |
| 84033121     | Application  |               | 10/29/2014  |            | PCT/US2014/062948  | PCT | STORING A DISCRETE ANALOG SIGNAL                                                                     |
| 84111409     | Application  |               | 1/30/2015   |            | PCT/US2015/013724  | PCT | COMPOSITE SELECTOR ELECTRODES                                                                        |
| 84111426     | Application  |               | 3/30/2015   |            | PCT/US2015/023270  | PCT | MANUFACTURING MEMRISTORS                                                                             |
| 84111492     | Application  |               | 1/9/2015    |            | PCT/US2015/010828  | PCT | SIDEWALL SPACERS                                                                                     |
| 84111618     | Application  |               | 42032       |            | PCT/US2015/013327  | PCT | MEMORY CELL WITH A MULTI-LAYERED SELECTOR                                                            |
| 84114486     | Application  |               | 1/26/2015   |            | PCT/US2015/012898  | PCT | RESISTIVE RANDOM ACCESS MEMORY (ReRAM) DEVICE                                                        |
| 84265197     | Application  |               | 42214       |            | PCT/US2015/042729  | PCT | NON-VOLATILE RESISTANCE MEMORY DEVICES INCLUDING A VOLATILE SELECTOR WITH COPPER AND SILICON DIOXIDE |
| 90034152     | Acknowledged |               |             |            |                    | PCT | High Performance and Low Power Neural Network Using Hybrid Synaptic Architecture                     |
| 90037043     | Application  |               | 9/25/2015   |            | PCT/US2015/052262  | PCT | CROSSBAR ARRAYS FOR CALCULATING MATRIX MULTIPLICATION                                                |
| 83140511     | Published    |               | 1/18/2013   |            | PCT/CN2013/070640  | PCT | PREVENTING A MEMORY ATTACK TO A WIRELESS ACCESS POINT                                                |
| 83140548     | Published    |               | 1/24/2013   |            | PCT/CN2013/070918  | PCT | LIMITING ACCESS TO SERVICE PROVIDERS BASED ON THE NETWORK TRAFFIC LOAD OF A WIRELESS ACCESS POINT    |
| 83209765     | Published    |               | 8/9/2013    |            | PCT/US2013/054254  | PCT | SWITCH ASSEMBLY                                                                                      |
| 83267332     | Published    |               | 9/13/2013   |            | PCT/US2013/059632  | PCT | SUBCARRIER POWER REALLOCATION                                                                        |
| 83821019     | Application  |               | 4/30/2014   |            | PCT/US2014/036006  | PCT | Practical CSI-based rate adaptation and prediction for wireless networks                             |
| 83824680     | Application  |               | 4/24/2014   |            | PCT/US2014/035262  | PCT | PLACING VIRTUAL MACHINES ON PHYSICAL HARDWARE TO GUARANTEE BANDWIDTH                                 |
| 83956115     | Application  |               | 9/29/2014   |            | PCT/CN2014/087773  | PCT | Adaptive Split and Compression                                                                       |
| 83957993     | Application  |               | 6/13/2014   |            | PCT/US2014/042313  | PCT | Motion-aware MCS adaptation for wireless networks                                                    |
| 84109036     | Application  |               | 11/14/2014  |            | PCT/US2014/065819  | PCT | DETERMINING A LOCATION OF A DEVICE                                                                   |
| 83763747     | Published    |               | 1/24/2014   |            | PCT/US2014/013059  | PCT | OPTICAL MODULATION EMPLOYING HIGH CONTRAST GRATING LENS                                              |
| 83763804     | Published    |               | 1/24/2014   |            | PCT/US2014/012872  | PCT | RING LASER OPTICAL SYSTEM                                                                            |
| 83763810     | Published    |               | 1/31/2014   |            | PCT/US2014/014015  | PCT | INTERPOSER                                                                                           |
| 83777398     | Published    |               | 41669       |            | PCT/US2014/013769  | PCT | OPTICAL MODULATION EMPLOYING FLUID MOVEMENT                                                          |
| 83958531     | Application  |               | 7/30/2014   |            | PCT/US2014/048833  | PCT | HYBRID MULTILAYER DEVICE                                                                             |

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| 84033639     | Application  |               | 1/27/2015   |            | PCT/US2015/013125  | PCT | TUNABLE MICRORING RESONATOR SWITCHES                                                                                                       |
| 84111509     | Application  |               | 5/8/2015    |            | PCT/US2015/029813  | PCT | OPTICAL LOGIC GATES                                                                                                                        |
| 84111549     | Application  |               | 2/27/2015   |            | PCT/US2015/018194  | PCT | HYPERSPECTRAL SCANNING                                                                                                                     |
| 84111678     | Application  |               | 1/28/2015   |            | PCT/US2015/013306  | PCT | LASER-WRITTEN OPTICAL ROUTING SYSTEMS AND METHOD                                                                                           |
| 84220185     | Application  |               | 5/27/2015   |            | PCT/US2015/032680  | PCT | BIAS-BASED MACH-ZEHNDER MODULATION (MZM) SYSTEMS                                                                                           |
| 84262512     | Application  |               | 9/4/2015    |            | PCT/US2015/048625  | PCT | TAPERED OPTICAL WAVEGUIDES                                                                                                                 |
| 84262724     | Application  |               | 9/22/2015   |            | PCT/US2015/051502  | PCT | OPTICAL NOTCH FILTERS                                                                                                                      |
| 84262784     | Application  |               | 8/6/2015    |            | PCT/US2015/043937  | PCT | OPTICAL PHASE MODULATORS                                                                                                                   |
| 90037690     | To Be Filed  |               |             |            |                    | PCT | Polarization Diversity receiver with light traveling in both directions                                                                    |
| 90068524     | Instructed   |               |             |            |                    | PCT | ASYMMETRIC TRANSITION PRE-EMPHASIS FOR PUSH-PULL MZM DRIVE - UHU                                                                           |
| 83954870     | Application  |               | 9/5/2014    |            | PCT/US2014/054364  | PCT | Dynamically Generating an Aggregation Routine                                                                                              |
| 84115030     | Application  |               | 3/3/2015    |            | PCT/US2015/018555  | PCT | COMMAND PARSING IN COMMAND-LINE-INTERFACE                                                                                                  |
| 90037435     | To Be Filed  |               |             |            |                    | PCT | Modular and Expandable PCIe Serial Hot-Plug Controller provides ability to remove and replace large numbers of PCIe connected FRU's.       |
| 83822579     | Application  |               | 4/30/2014   |            | PCT/US2014/036034  | PCT | Network Fabric Control                                                                                                                     |
| 83956075     | Application  |               | 6/30/2014   |            | PCT/US2014/044811  | PCT | FLOW TABLE COMPARISON                                                                                                                      |
| 83958013     | Application  |               | 6/10/2014   |            | PCT/US2014/041750  | PCT | Monitoring Network Traffic                                                                                                                 |
| 84033138     | Application  |               | 11/6/2014   |            | PCT/US2014/064337  | PCT | DETERMINE RESPONSIVENESS TO A MODELED CHANGE IN A SIMULATED ENVIRONMENT                                                                    |
| 84111804     | Application  |               | 4/16/2015   |            | PCT/US2015/026234  | PCT | Controlling an unknown flow inflow to an SDN controller in a software defined network (SDN)                                                |
| 84172448     | Application  |               | 8/14/2015   |            | PCT/US2015/045283  | PCT | IMPLEMENTING FORWARDING BEHAVIOR BASED ON COMMUNICATION ACTIVITY BETWEEN A CONTROLLER AND A NETWORK DEVICE                                 |
| 83819084     | Application  |               | 4/28/2014   |            | PCT/US2014/035754  | PCT | COMMUNICATION ASSOCIATED WITH MULTIPLE NODES FOR DELIVERY OF POWER                                                                         |
| 84262532     | Acknowledged |               |             |            |                    | PCT | A novel method to control parallel switches to enable multiple line, and dynamically changing DC load in a HVDC distributed energy system. |
| 90031046     | To Be Filed  |               |             |            |                    | PCT | Conversion of male/female coupling to lug connections that comply with telecom customer DC Power purchasing requirements                   |

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| 83955972     | Application  |               | 41911       |            | PCT/US2014/057949  | PCT | FAN CONTROLLED AMBIENT AIR COOLING OF EQUIPMENT IN A CONTROLLED AIRFLOW ENVIRONMENT                                                                                                     |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 84030811     | Application  |               | 11/14/2014  |            | PCT/US2014/065643  | PCT | COOLING RACK                                                                                                                                                                            |
| 84294377     | Application  |               | 9/4/2015    |            | PCT/US2015/048495  | PCT | VALVE FAILURE PREDICTIONS                                                                                                                                                               |
| 84111446     | Application  |               | 42090       |            | PCT/US2015/023138  | PCT | COMMUNICATION ASSOCIATION MODEL                                                                                                                                                         |
| 84172943     | Application  |               | 5/21/2015   |            | PCT/US2015/032083  | PCT | CONTRACT TOKEN INCLUDING SENSOR DATA                                                                                                                                                    |
| 90036934     | Acknowledged |               |             |            |                    | PCT | Complex Action Automation: Spell Bar and Automated Reporting. Elimination of repetitive tasks by users working across multiple windows, multiple applications, and/or multiple devices. |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83268726     | Published    |               | 9/30/2013   |            | PCT/US2013/062530  | PCT | LEGACY SYSTEM                                                                                                                                                                           |
| 83268886     | Published    |               | 8/28/2013   |            | PCT/US2013/056944  | PCT | MESSAGE DELIVERY VIA PREFERRED COMMUNICATIONS APPLICATIONS                                                                                                                              |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83960944     | Application  |               | 7/30/2014   |            | PCT/US2014/048834  | PCT | SECURITY RISK SCORING OF AN APPLICATION                                                                                                                                                 |
| 84113344     | Application  |               | 2/26/2015   |            | PCT/US2015/017765  | PCT | OBTAINING TRANSLATIONS UTILIZING TEST STEP AND SUBJECT APPLICATION DISPLAYS                                                                                                             |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83156592     | Published    |               | 4/24/2013   |            | PCT/US2013/037971  | PCT | A Drift-Tolerant, Multilevel-Cell Phase Change Memory                                                                                                                                   |
| 83270910     | Published    |               | 41547       |            | PCT/US2013/062667  | PCT | PROGRAMMING MEMORY CONTROLLERS TO ALLOW PERFORMANCE OF ACTIVE MEMORY OPERATIONS                                                                                                         |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83629306     | Published    |               | 41576       |            | PCT/US2013/067239  | PCT | MAPPING VIRTUAL MEMORY PAGES TO PHYSICAL MEMORY PAGES                                                                                                                                   |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83764288     | Published    |               | 1/31/2014   |            | PCT/US2014/014253  | PCT | PERFORMING PROCESSING TASKS USING AN AUXILIARY PROCESSING UNIT                                                                                                                          |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 83820246     | Application  |               | 4/29/2014   |            | PCT/US2014/035969  | PCT | HARDWARE ASSISTED SOFTWARE VERSIONING OF CLUSTERED APPLICATIONS                                                                                                                         |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 84003377     | Application  |               | 7/22/2014   |            | PCT/US2014/047703  | PCT | NODE-BASED COMPUTING DEVICES WITH VIRTUAL CIRCUITS                                                                                                                                      |
|              |              |               |             |            |                    |     |                                                                                                                                                                                         |
| 84030682     | Application  |               | 10/31/2014  |            | PCT/US2014/063311  | PCT | ANALYSIS FOR MULTI-NODE COMPUTING SYSTEMS                                                                                                                                               |
| 84037111     | Application  |               | 1/29/2015   |            | PCT/US2015/013605  | PCT | FOSTER TWIN DATA STRUCTURE                                                                                                                                                              |
| 84113762     | Application  |               | 42034       |            | PCT/US2015/013764  | PCT | Chunk Monitoring                                                                                                                                                                        |
| 84113779     | Application  |               | 1/30/2015   |            | PCT/US2015/013768  | PCT | CHECKPOINT-BASED SCHEDULING IN CLUSTER                                                                                                                                                  |
| 84113802     | Application  |               | 3/6/2015    |            | PCT/US2015/019180  | PCT | DATA WRITE TO SUBSET OF MEMORY DEVICES                                                                                                                                                  |
| 84262495     | Application  |               | 9/17/2015   |            | PCT/US2015/050732  | PCT | MEMORY STORE ERROR CHECK                                                                                                                                                                |
| 84262764     | Application  |               | 9/24/2015   |            | PCT/US2015/051904  | PCT | FAILURE INDICATION IN SHARED MEMORY                                                                                                                                                     |
| 90037747     | Application  |               | 9/25/2015   |            | PCT/US2015/052254  | PCT | VARIABLE CACHE FOR NON-VOLATILE MEMORY                                                                                                                                                  |
| 83209175     | Published    |               | 4/2/2013    |            | PCT/US2013/034995  | PCT | Query integration across databases and file systems                                                                                                                                     |
| 83209842     | Published    |               | 4/3/2013    |            | PCT/US2013/035080  | PCT | MODIFYING A FLOW OF OPERATIONS TO BE EXECUTED IN A PLURALITY OF EXECUTION ENVIRONMENTS                                                                                                  |

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| 83269255     | Published    |               | 9/12/2013   |            | PCT/CN2013/083415  | PCT | Information Extraction                                                                                                  |
| 83271757     | Published    |               | 7/31/2013   |            | PCT/US2013/052848  | PCT | CLUSTERS OF POLYNOMIALS FOR DATA POINTS                                                                                 |
| 83623595     | Published    |               | 10/31/2013  |            | PCT/US2013/067773  | PCT | STORING TIME SERIES DATA FOR A SEARCH QUERY                                                                             |
| 83734876     | Published    |               | 12/20/2013  |            | PCT/US2013/076779  | PCT | IDENTIFYING A PATH IN A WORKLOAD THAT MAY BE ASSOCIATED WITH A DEVIATION                                                |
| 83747150     | Application  |               | 3/31/2014   |            | PCT/US2014/032336  | PCT | PARALLELIZING SQL ON DISTRIBUTED FILE SYSTEMS                                                                           |
| 83776619     | Published    |               | 1/30/2014   |            | PCT/US2014/013773  | PCT | OPTIMIZING WINDOW JOINS OVER DATA STREAMS                                                                               |
| 83954297     | Application  |               | 12/11/2014  |            | PCT/US2014/069745  | PCT | INTERACTIVE DETECTION OF SYSTEM ANOMALIES                                                                               |
| 84028824     | Application  |               | 9/30/2014   |            | PCT/US2014/058483  | PCT | Database and Data Stream Query                                                                                          |
| 84113255     | Application  |               | 1/28/2015   |            | PCT/US2015/013303  | PCT | DETECTING ANOMALOUS SENSOR DATA                                                                                         |
| 84171483     | Application  |               | 4/10/2015   |            | PCT/CN2015/076307  | PCT | HIDDEN DYNAMIC SYSTEMS                                                                                                  |
| 84171603     | Application  |               | 7/24/2015   |            | PCT/US2015/042024  | PCT | Data Porch System-on-Chip for DMC                                                                                       |
| 84259987     | Application  |               | 5/29/2015   |            | PCT/US2015/033319  | PCT | CONTROLLING REMOTE MEMORY ACCESSES IN A MULTIPLE PROCESSING                                                             |
|              |              |               |             |            |                    |     | NODE GRAPH INFERENCE ENGINE                                                                                             |
| 84262772     | Application  |               | 8/28/2015   |            | PCT/US2015/047565  | PCT | GRAPH INFERENCE CALCULATOR                                                                                              |
| 84262921     | Application  |               | 6/11/2015   |            | PCT/US2015/036186  | PCT | POINTING ACTION                                                                                                         |
| 90016885     | Application  |               | 9/4/2015    |            | PCT/US2015/048562  | PCT | GRAPH DATABASE MANAGEMENT                                                                                               |
| 90037094     | Acknowledged |               |             |            |                    | PCT | Methods of Finding Meaningful Cohorts in High Dimensional Space Using Automated Weighting and Multi-Level Ranking       |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90037114     | To Be Filed  |               |             |            |                    | PCT | Spiral Histogram Visualization & Animation with Provision for Multiple Key Performance Indicators                       |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90037134     | To Be Filed  |               |             |            |                    | PCT | Incremental Clustering of High Dimensional Data Streams via Hubness Analysis                                            |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90037140     | To Be Filed  |               |             |            |                    | PCT | Secure Storage Container Allocation with a Semi-Honest Intermediary Node                                                |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90037286     | To Be Filed  |               |             |            |                    | PCT | Concomitant rank order hash suppression                                                                                 |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 83270941     | Published    |               | 7/30/2013   |            | PCT/US2013/052646  | PCT | DATA MANAGEMENT                                                                                                         |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 83632154     | Published    |               | 415/8       |            | PCT/US2013/067759  | PCT | COPY-ON-WRITE UPDATE-TRIGGERED CONSISTENCY                                                                              |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 83954386     | Application  |               | 7/31/2014   |            | PCT/US2014/049022  | PCT | DATA STORAGE IN FOG COMPUTING                                                                                           |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 84113103     | Application  |               | 3/20/2015   |            | PCT/US2015/021632  | PCT | DATASTREAM BLOCK ENCRYPTION                                                                                             |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90037449     | To Be Filed  |               |             |            |                    | PCT | Mitigating performance issues introduced by indirect addressing of objects in heap structures (in non-volatile memory). |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 90039593     | Application  |               | 8/28/2015   |            | PCT/US2015/047524  | PCT | IDENTIFICATION OF A DNS PACKET AS MALICIOUS BASED ON A VALUE                                                            |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 83209782     | Published    |               | 4/16/2013   |            | PCT/US2013/036745  | PCT | EVENT SUMMARIZATION                                                                                                     |
|              |              |               |             |            |                    |     |                                                                                                                         |
| 83953069     | Application  |               | 6/26/2014   |            | PCT/US2014/044452  | PCT | DATASET BROWSING USING ADDITIVE FILTERS                                                                                 |

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| 83953341     | Application |               | 6/30/2014   |            | PCT/US2014/044814  | PCT | IDENTIFYING FEASIBLE PRODUCT CONFIGURATIONS FOR CONSUMERS              |
| 83748736     | Application |               | 4/21/2014   |            | PCT/US2014/034842  | PCT | MAGNETIZATION MAP OF A STORAGE MEDIUM                                  |
| 83748750     | Application |               | 4/28/2014   |            | PCT/US2014/035719  | PCT | STORAGE MANAGEMENT                                                     |
| 83953387     | Application |               | 7/10/2014   |            | PCT/US2014/046082  | PCT | Archive File                                                           |
| 83819049     | Application |               | 9/23/2014   |            | PCT/US2014/057070  | PCT | SECURING DATA IN A FILE SYSTEM                                         |
| 83819069     | Application |               | 7/24/2014   |            | PCT/US2014/048005  | PCT | Journal Events In A File System And A Database                         |
| 83825670     | Application |               | 8/15/2014   |            | PCT/US2014/051187  | PCT | THREE PHASE COMMIT FOR A DISTRIBUTED FILE SYSTEM                       |
| 84107364     | Application |               | 1/15/2015   |            | PCT/US2015/011540  | PCT | DATA MANAGEMENT FOR TENANTS                                            |
| 84113335     | Application |               | 1/30/2015   |            | PCT/US2015/013797  | PCT | Dynamically Inheritable Attribute                                      |
| 84212645     | Application |               | 4/24/2015   |            | PCT/US2015/027422  | PCT | POLICY AND CONFIGURATION DATA FOR A USER DIRECTORY                     |
| 84222025     | Application |               | 4/21/2015   |            | PCT/US2015/026898  | PCT | File Level Snapshots In A File System                                  |
| 90035162     | To Be Filed |               |             |            |                    | PCT | PIP-OBI Content driven real time analytics data and index flow         |
| 83954363     | Application |               | 7/22/2014   |            | PCT/US2014/047584  | PCT | GRADING INFORMATION TECHNOLOGY INFRASTRUCTURES                         |
| 84172811     | Application |               | 3/24/2015   |            | PCT/US2015/022111  | PCT | CONTEXT-BASED FEATURE MANAGEMENT                                       |
| 83200413     | Published   |               | 6/28/2013   |            | PCT/US2013/048422  | PCT | LEVER UNIT                                                             |
| 83206908     | Published   |               | 41442       |            | PCT/US2013/046141  | PCT | GUIDE SEGMENT IDENTIFICATION                                           |
| 83216274     | Published   |               | 4/3/2013    |            | PCT/US2013/035163  | PCT | Managing Firmware Updates                                              |
| 83268671     | Published   |               | 6/25/2013   |            | PCT/US2013/047483  | PCT | UNINTERRUPTIBLE POWER SUPPLY WITH INVERTER, CHARGER, AND ACTIVE FILTER |
| 83268697     | Published   |               | 8/29/2013   |            | PCT/US2013/057225  | PCT | ERROR DISPLAY MODULE                                                   |
| 83597959     | Application |               | 11/1/2013   |            | PCT/US2013/067915  | PCT | TOP LOADING CARTRIDGE                                                  |
| 83738454     | Application |               | 1/30/2014   |            | PCT/US2014/013806  | PCT | MOUNTING DEVICE                                                        |
| 83957340     | Application |               | 7/31/2014   |            | PCT/US2014/049109  | PCT | NEXT GENERATION FORM FACTOR CONNECTOR                                  |
| 84028944     | Application |               | 8/29/2014   |            | PCT/US2014/053383  | PCT | THERMAL MANAGEMENT DOOR ASSEMBLY                                       |
| 84049740     | Application |               | 9/24/2014   |            | PCT/US2014/057165  | PCT | HEAT SINK WITH A LOAD SPREADING BAR                                    |
| 84051503     | Application |               | 9/26/2014   |            | PCT/US2014/057856  | PCT | Receptacle for connection a multi-lane or one-lane cable               |
| 84113670     | Application |               | 2/20/2015   |            | PCT/US2015/016952  | PCT | EXTERNALLY ACCESSIBLE REPLACEABLE POWER SOURCE                         |
| 84114795     | Application |               | 1/20/2015   |            | PCT/US2015/012009  | PCT | Latch Assembly for a Computing Device                                  |
| 84143471     | Application |               | 2/18/2015   |            | PCT/US2015/016283  | PCT | PULL-TABS FOR DISENGAGING A CABLE ASSEMBLY FROM A RECEPTACLE           |
| 84155645     | Application |               | 2/27/2015   |            | PCT/US2015/017970  | PCT | FEATURES TO CONJOIN ONE-LANE CABLE ASSEMBLIES                          |
| 84169880     | Application |               | 4/24/2015   |            | PCT/US2015/027571  | PCT | CABLE TRACK                                                            |
| 84173106     | Application |               | 4/24/2015   |            | PCT/US2015/027578  | PCT | FIRST AND SECOND MEMBERS TO SECURE DEVICES                             |
| 84263064     | Application |               | 8/27/2015   |            | PCT/US2015/047220  | PCT | NETWORK CABLE MANAGEMENT ARM                                           |
| 90031080     | To Be Filed |               |             |            |                    | PCT | FIPS Compliant Louver                                                  |

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| 83272458     | Published    |               | 7/22/2013   |            | PCT/US2013/051515  | PCT | Motherboard With a Hole                                                                                     |
| 83757747     | Published    |               | 1/30/2014   |            | PCT/US2014/013797  | PCT | PRINTED CIRCUIT BOARD WITH CO-AXIAL VIAS                                                                    |
| 84030570     | Application  |               | 9/12/2014   |            | PCT/US2014/055498  | PCT | ISOLATION OF A FAULTY MEZZANINE CARD OF A SERVER                                                            |
| 84170395     | Application  |               | 4/29/2015   |            | PCT/US2015/028322  | PCT | CONVERGED INFRASTRUCTURE MANAGER                                                                            |
| 84261484     | Application  |               | 42202       |            | PCT/US2015/040986  | PCT | OPERATING FREQUENCY DETERMINATION                                                                           |
| 83269215     | Published    |               | 8/27/2013   |            | PCT/US2013/056768  | PCT | EXPANDER DATA ROUTING                                                                                       |
| 83598042     | Published    |               | 9/24/2013   |            | PCT/US2013/061486  | PCT | SAS CONFIGURATION MANAGEMENT                                                                                |
| 83618649     | Application  |               | 12/3/2013   |            | PCT/US2013/072813  | PCT | ELECTRICAL CONNECTOR ASSEMBLY                                                                               |
| 83733731     | Application  |               | 1/9/2014    |            | PCT/US2014/010914  | PCT | Segmented Status Display                                                                                    |
| 83958256     | Application  |               | 7/29/2014   |            | PCT/US2014/048673  | PCT | STORAGE TRANSACTIONS                                                                                        |
| 84113876     | Application  |               | 42090       |            | PCT/US2015/022946  | PCT | FILE MIGRATION TO PERSISTENT MEMORY                                                                         |
| 84114002     | Application  |               | 42122       |            | PCT/US2015/027999  | PCT | STORAGE CACHE MANAGEMENT                                                                                    |
| 84170146     | Application  |               | 4/30/2015   |            | PCT/US2015/028540  | PCT | Data Replication                                                                                            |
| 84262675     | Application  |               | 8/31/2015   |            | PCT/US2015/047803  | PCT | Storage Area Network Management                                                                             |
| 84274016     | Application  |               | 7/31/2015   |            | PCT/US2015/043245  | PCT | Disk Array Having Controller to Allocate Ports                                                              |
| 83763758     | Published    |               | 41668       |            | PCT/US2014/013529  | PCT | ELECTRO-OPTICAL SIGNAL TRANSMISSION                                                                         |
| 84030553     | Application  |               | 10/23/2014  |            | PCT/US2014/061934  | PCT | ADMISSIONS CONTROL OF A DEVICE                                                                              |
| 84033092     | Application  |               | 10/29/2014  |            | PCT/US2014/062783  | PCT | OPTICAL CONNECTOR ASSEMBLY APPARATUS                                                                        |
| 84111712     | Application  |               | 4/9/2015    |            | PCT/US2015/025040  | PCT | TERMINATION VOLTAGE CIRCUITS                                                                                |
| 84111895     | Application  |               | 1/31/2015   |            | PCT/US2015/014012  | PCT | OPTICAL MULTIPLEXER                                                                                         |
| 84264604     | Application  |               | 7/17/2015   |            | PCT/US2015/040949  | PCT | DATA TAMPER DETECTION                                                                                       |
| 90035122     | Application  |               | 9/28/2015   |            | PCT/US2015/052652  | PCT | PROTOCOL CONVERSION FOR SERVERS AND CHASSIS                                                                 |
| 83733768     | Published    |               | 2/7/2014    |            | PCT/US2014/015378  | PCT | POWER SOURCING EQUIPMENT                                                                                    |
| 83735271     | Application  |               | 1/29/2014   |            | PCT/US2014/013684  | PCT | MANAGING A NUMBER OF ETHERNET LINKS                                                                         |
| 83957755     | Application  |               | 41845       |            | PCT/US2014/048247  | PCT | Exception Predication                                                                                       |
| 84171351     | Application  |               | 42124       |            | PCT/US2015/028399  | PCT | FORWARDING PORT ASSIGNMENT FOR DATA PACKET                                                                  |
| 84172456     | Application  |               | 4/17/2015   |            | PCT/US2015/026412  | PCT | MORPHED INSTRUCTION ACCORDING TO CONFIGURATION                                                              |
| 84264086     | Application  |               | 9/30/2015   |            | PCT/US2015/053082  | PCT | UPDATE                                                                                                      |
| 90039613     | To Be Filed  |               |             |            |                    | PCT | NETWORK NODES IN A RING NETWORK                                                                             |
| 83623435     | Published    |               | 10/16/2013  |            | PCT/US2013/065217  | PCT | Enhanced Switch Chassis Air Inlet Venting Adjacent to Existing Connector Modules                            |
| 90039510     | Acknowledged |               |             |            |                    | PCT | REFLECTING MDNS PACKETS                                                                                     |
| 83273417     | Published    |               | 41473       |            | PCT/US2013/050990  | PCT | L2 authentication and accounting session retention during roaming on a distributed, autonomous WLAN network |
| 83276228     | Published    |               | 7/29/2013   |            | PCT/US2013/052590  | PCT | REMOTE STORAGE                                                                                              |
| 84033487     | Application  |               | 10/22/2014  |            | PCT/US2014/061801  | PCT | INTEGRITY OF FREQUENTLY USED DE-DUPLICATION OBJECTS                                                         |
| 84170255     | Application  |               | 4/29/2015   |            | PCT/EP2015/059394  | PCT | DATA RESTORATION USING BLOCK DISK PRESENTATIONS                                                             |
|              |              |               |             |            |                    |     | Computing Device                                                                                            |

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| 84260133     | Application  |               | 8/7/2015    |            | PCT/US2015/044143  | PCT | ENCRYPTED DATA CHUNKS                                                                                                                                                                                                   |
| 84031300     | Application  |               | 11/18/2014  |            | PCT/US2014/066128  | PCT | NETWORK BACKUP                                                                                                                                                                                                          |
| 84114580     | Application  |               | 1/28/2015   |            | PCT/US2015/013189  | PCT | ENTERPRISE SERVICE BUS SEQUENCER                                                                                                                                                                                        |
| 84173057     | Application  |               | 6/3/2015    |            | PCT/US2015/034036  | PCT | CUSTOMIZED EMAIL SUBJECT LINE                                                                                                                                                                                           |
| 84265231     | Instructed   |               |             |            |                    | PCT | One time security validation for virtual machines in some other<br>else's cloud                                                                                                                                         |
| 90037887     | To Be Filed  |               |             |            |                    | PCT | A system to provide adaptive security threat detection and<br>remediation                                                                                                                                               |
| 83099400     | Published    |               | 1/21/2013   |            | PCT/US2013/022394  | PCT | PALLETIZED LOAD REACTANT REGULATION HEATING                                                                                                                                                                             |
| 84232874     | Application  |               | 4/30/2015   |            | PCT/US2015/028632  | PCT | SERVICE LEVEL BASED CATEGORIZATION OF VIRTUAL<br>MACHINES                                                                                                                                                               |
| 90038013     | Application  |               | 9/25/2015   |            | PCT/US2015/052176  | PCT | SETUP FILE SYSTEM WITHOUT EDITING KERNEL CODE                                                                                                                                                                           |
| 84020434     | Application  |               | 8/29/2014   |            | PCT/US2014/053550  | PCT | IMPROVEMENT MESSAGE BASED ON ELEMENT SCORE                                                                                                                                                                              |
| 90035142     | Application  |               | 8/31/2015   |            | PCT/US2015/047789  | PCT | GENERATING A COMBINED ENTITY WORKFLOW                                                                                                                                                                                   |
| 90037718     | Acknowledged |               |             |            |                    | PCT | Intelligent Interface Automatic Communication Recovery and<br>Control (IIACRAC) represent method for interface automatic<br>communication recovery and control implementing<br>intelligent techniques like fuzzy logic. |
|              |              |               |             |            |                    |     | MONITORING A COMPUTING NETWORK                                                                                                                                                                                          |
| 83199460     | Published    |               | 6/17/2013   |            | PCT/IN2013/000373  | PCT | Event Log Analysis                                                                                                                                                                                                      |
| 83954257     | Application  |               | 41905       |            | PCT/US2014/056963  | PCT | ELEMENT IDENTIFIER GENERATION                                                                                                                                                                                           |
| 84113315     | Application  |               | 42059       |            | PCT/US2015/017185  | PCT | AGGREGATION BASED EVENT IDENTIFICATION                                                                                                                                                                                  |
| 84113352     | Application  |               | 42124       |            | PCT/US2015/028587  | PCT | METRIC CORRELATION                                                                                                                                                                                                      |
| 84262838     | Application  |               | 42198       |            | PCT/US2015/040090  | PCT | AUTOMATED CONTEXTUAL-BASED SOFTWARE LOCALIZATION                                                                                                                                                                        |
| 83205159     | Published    |               | 4/11/2013   |            | PCT/US2013/036183  | PCT | EVALUATING USER INTERFACE EFFICIENCY                                                                                                                                                                                    |
| 83598254     | Published    |               | 1/30/2014   |            | PCT/US2014/013835  | PCT | TECHNOLOGY RECOMMENDATION FOR SOFTWARE<br>ENVIRONMENT                                                                                                                                                                   |
| 83640415     | Published    |               | 10/30/2013  |            | PCT/US2013/067517  | PCT | MODIFYING A HIERARCHAL STRUCTURE                                                                                                                                                                                        |
| 83814306     | Application  |               | 2/14/2014   |            | PCT/US2014/016393  | PCT | DISTRIBUTED COMPILATION OF STATICALLY TYPED<br>LANGUAGES                                                                                                                                                                |
| 83820944     | Application  |               | 5/27/2014   |            | PCT/US2014/039581  | PCT | Detection of User Interface Layout Changes                                                                                                                                                                              |
| 84106276     | Application  |               | 11/24/2014  |            | PCT/US2014/067071  | PCT | LOAD TESTING                                                                                                                                                                                                            |
| 84113043     | Application  |               | 12/23/2014  |            | PCT/US2014/072061  | PCT | CODE COVERAGE INFORMATION                                                                                                                                                                                               |
| 84170421     | Application  |               | 42109       |            | PCT/US2015/025879  | PCT | TREND CORRELATIONS                                                                                                                                                                                                      |
| 84172731     | Application  |               | 4/29/2015   |            | PCT/US2015/028148  | PCT | APPLICATION TESTING                                                                                                                                                                                                     |
| 84217863     | Application  |               | 4/30/2015   |            | PCT/CN2015/078055  | PCT | Component Profile Display                                                                                                                                                                                               |
| 84262732     | Application  |               | 7/28/2015   |            | PCT/US2015/042534  | PCT | Binary change detection by disassembly and machine learning                                                                                                                                                             |
| 90027147     | To Be Filed  |               |             |            |                    | PCT | Automatic tool for comparing two web scripts                                                                                                                                                                            |
| 90035351     | Acknowledged |               |             |            |                    | PCT |                                                                                                                                                                                                                         |

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| 90037827     | To Be Filed |               |             |            |                    | PCT | Tips: Efficient Tips to Change the Future                                                                                                                                                                                                      |
| 90037847     | To Be Filed |               |             |            |                    | PCT | Wrong password? New password!                                                                                                                                                                                                                  |
| 83271611     | Published   |               | 41444       |            | PCT/US2013/046612  | PCT | UNIFYING APPLICATION LOG MESSAGES USING RUNTIME INSTRUMENTATION                                                                                                                                                                                |
| 83833264     | Application |               | 4/22/2014   |            | PCT/US2014/034888  | PCT | IDENTIFYING A FUNCTIONAL FRAGMENT OF A DOCUMENT OBJECT MODEL TREE                                                                                                                                                                              |
| 83833327     | Application |               | 5/20/2014   |            | PCT/US2014/038848  | PCT | POINT-WISE PROTECTION OF APPLICATION USING RUNTIME-AGENT                                                                                                                                                                                       |
| 84032983     | Application |               | 11/26/2014  |            | PCT/US2014/067658  | PCT | DETERMINE VULNERABILITY USING RUNTIME AGENT AND NETWORK SNIFFER                                                                                                                                                                                |
| 84033567     | Application |               | 12/16/2014  |            | PCT/US2014/070594  | PCT | DETERMINING PERMISSIBLE ACTIVITY BASED ON PERMISSIBLE ACTIVITY RULES                                                                                                                                                                           |
| 84240216     | Application |               | 8/12/2015   |            | PCT/US2015/044903  | PCT | Application security issue classifier policy based training and classification                                                                                                                                                                 |
| 84262320     | Application |               | 8/12/2015   |            | PCT/US2015/044877  | PCT | Training a machine learning classifier to evaluate application security issues                                                                                                                                                                 |
| 90037074     | To Be Filed |               |             |            |                    | PCT | System and Method to perform an automated multi-credential vulnerability assessment with different privileges                                                                                                                                  |
| 83272318     | Published   |               | 7/31/2013   |            | PCT/US2013/053067  | PCT | CLOUD BASED SERVICE DESIGN INHERITANCE                                                                                                                                                                                                         |
| 83272375     | Published   |               | 9/4/2013    |            | PCT/US2013/058048  | PCT | SELECTION OF RESOURCE PROVIDERS FOR MULTI-TENANCY PROVISION OF BUILDING BLOCKS                                                                                                                                                                 |
| 83273171     | Published   |               | 10/30/2013  |            | PCT/US2013/067397  | PCT | MANAGEMENT OF THE LIFECYCLE OF A CLOUD SERVICE MODELED AS A TOPOLOGY                                                                                                                                                                           |
| 83663286     | Published   |               | 10/23/2013  |            | PCT/US2013/066417  | PCT | Tracking a Status of a Process                                                                                                                                                                                                                 |
| 83961788     | Application |               | 9/30/2014   |            | PCT/US2014/058339  | PCT | TOPOLOGY BASED MANAGEMENT WITH COMPLIANCE POLICIES                                                                                                                                                                                             |
| 84051423     | Application |               | 9/19/2014   |            | PCT/US2014/056600  | PCT | Billing Consumption Of Cloud-Based Resources                                                                                                                                                                                                   |
| 84172771     | Application |               | 6/5/2015    |            | PCT/US2015/034377  | PCT | PROMOTION ARTIFACT RISK ASSESSMENT                                                                                                                                                                                                             |
| 90035371     | To Be Filed |               |             |            |                    | PCT | A solution to prevent the security vulnerability on release automation tool component or application deployment designs using application security solution tool before the designs are used to deploy application on hybrid cloud environment |
| 83954317     | Application |               | 7/30/2014   |            | PCT/US2014/048849  | PCT | MODIFYING WEB PAGES BASED UPON IMPORTANCE RATINGS AND BANDWIDTH                                                                                                                                                                                |

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| 83416697     | Application |               | 6/21/2013   |            | PCT/FR2013/000157  | PCT | GRAPHICAL INTERFACE TO EDIT THRESHOLDS                                                        |
| 83834080     | Application |               | 4/29/2014   |            | PCT/US2014/035814  | PCT | SERVICE PROVISIONING                                                                          |
| 83953464     | Application |               | 8/29/2014   |            | PCT/CN2014/085541  | PCT | VIRTUAL MACHINE SERVICE AVAILABILITY                                                          |
| 83966534     | Application |               | 8/4/2014    |            | PCT/US2014/049550  | PCT | NETWORK INFRASTRUCTURE MANAGEMENT                                                             |
| 84122592     | Published   |               | 12/17/2014  |            | PCT/US2014/070976  | PCT | DISPLAYING A DASHBOARD BASED ON CONSTRAINTS OF USER DEVICE                                    |
| 84194265     | Application |               | 3/27/2015   |            | PCT/US2015/023029  | PCT | RENDERING A USER INTERFACE                                                                    |
| 84263110     | To Be Filed |               |             |            |                    | PCT | WEB-APPLICATION-LAUNCH APPLICATION PROGRAMMING INTERFACES                                     |
| 84173037     | Application |               | 5/27/2015   |            | PCT/US2015/032547  | PCT | COMMUNICATION IN A FEDERATED COMPUTING ENVIRONMENT                                            |
| 84251703     | Application |               | 7/31/2015   |            | PCT/US2015/043054  | PCT | SERVER RESOURCE MANAGEMENT                                                                    |
| 83777329     | Published   |               | 1/31/2014   |            | PCT/US2014/014334  | PCT | TEST AUTOMATION MODELING                                                                      |
| 83820964     | Application |               | 7/10/2014   |            | PCT/US2014/046173  | PCT | Relocating A Virtual Address In A Persistent Memory                                           |
| 84221547     | Application |               | 4/16/2015   |            | PCT/US2015/026064  | PCT | CLUSTER ARBITRATION                                                                           |
| 84303084     | Application |               | 7/9/2015    |            | PCT/US2015/039771  | PCT | BYTE ADDRESSABLE NON-VOLATILE RANDOM ACCESS MEMORY FOR STORING LOG RECORD                     |
| 83153051     | Published   |               | 7/10/2013   |            | PCT/US2013/049951  | PCT | STORAGE DEVICE WRITE PULSE CONTROL                                                            |
| 83206135     | Published   |               | 41394       |            | PCT/US2013/038830  | PCT | Memory Access Rate                                                                            |
| 83268963     | Published   |               | 9/27/2013   |            | PCT/US2013/062233  | PCT | REFRESH ROW ADDRESS                                                                           |
| 83269152     | Published   |               | 9/23/2013   |            | PCT/US2013/061233  | PCT | VALIDATE WRITTEN DATA                                                                         |
| 83757913     | Published   |               | 1/30/2014   |            | PCT/US2014/013849  | PCT | MANAGING DATA USING A NUMBER OF NON-VOLATILE MEMORY ARRAYS                                    |
| 83757930     | Published   |               | 1/31/2014   |            | PCT/US2014/014124  | PCT | ENCODING DATA IN A MEMORY ARRAY                                                               |
| 83957861     | Application |               | 7/31/2014   |            | PCT/US2014/049193  | PCT | LIVE MIGRATION OF DATA                                                                        |
| 84031031     | Application |               | 11/25/2014  |            | PCT/US2014/067247  | PCT | COMPUTING RESOURCE WITH MEMORY RESOURCE MEMORY MANAGEMENT                                     |
| 84031237     | Application |               | 1/30/2015   |            | PCT/US2015/013795  | PCT | SYSTEMS AND METHODS FOR SHARING NON-VOLATILE MEMORY BETWEEN MULTIPLE ACCESS MODELS            |
| 84031280     | Application |               | 10/31/2014  |            | PCT/US2014/063527  | PCT | Management Controller                                                                         |
| 84031343     | Application |               | 12/10/2014  |            | PCT/US2014/069458  | PCT | A Multi-Tier Security Framework                                                               |
| 84111417     | Application |               | 1/12/2015   |            | PCT/US2015/010974  | PCT | HANDLING MEMORY ERRORS IN MEMORY MODULES THAT INCLUDE VOLATILE AND NON-VOLATILE COMPONENTS    |
| 84111589     | Application |               | 3/6/2015    |            | PCT/US2015/019201  | PCT | CONTROLLER CONTROL PROGRAM                                                                    |
| 84111858     | Application |               | 1/28/2015   |            | PCT/US2015/013319  | PCT | GARBAGE COLLECTOR                                                                             |
| 84171254     | Application |               | 4/10/2015   |            | PCT/US2015/025226  | PCT | PARTIAL BACKUP DURING RUNTIME FOR MEMORY MODULES WITH VOLATILE MEMORY AND NON-VOLATILE MEMORY |

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| 84260193     | Application |               | 8/18/2015   |            | PCT/US2015/045683  | PCT | POST PACKAGE REPAIR FOR MAPPING TO A MEMORY FAILURE PATTERN                                |
| 84262503     | Application |               | 8/7/2015    |            | PCT/US2015/044338  | PCT | MAPPING RESISTANCE LEVEL STATES TO MULTI-BIT DATA VALUES                                   |
| 90035179     | To Be Filed |               |             |            |                    | PCT | Read Bypass Past Pending Writes for Fixed Timing Memory Interfaces                         |
| 83205219     | Published   |               | 6/3/2013    |            | PCT/IN2013/000353  | PCT | INFLUENCE SCORE OF A SOCIAL MEDIA DOMAIN                                                   |
| 84030759     | Application |               | 11/3/2014   |            | PCT/IN2014/000709  | PCT | AUTOMATIC SCRIPT GENERATION                                                                |
| 84030882     | Application |               | 2/20/2015   |            | PCT/US2015/016811  | PCT | PERSONALIZED PROFILE-MODIFIED SEARCH FOR DIALOG CONCEPTS                                   |
| 84259532     | Application |               | 7/31/2015   |            | PCT/CN2015/085722  | PCT | TRANSLATE DATA STRUCTURE TO VIDEO FRAME STRUCTURE                                          |
| 83820157     | Application |               | 5/28/2014   |            | PCT/US2014/039753  | PCT | MANAGING A FLUID CONDITION IN A PIPE                                                       |
| 83204515     | Published   |               | 4/29/2013   |            | PCT/US2013/038597  | PCT | SERVICE PRICE INDEX                                                                        |
| 84030776     | Application |               | 12/19/2014  |            | PCT/US2014/071402  | PCT | Model-Driven Architecture For User-Centered Design                                         |
| 84111400     | Application |               | 12/19/2014  |            | PCT/US2014/071380  | PCT | Specifying Models of an Architectural Type                                                 |
| 84117640     | Application |               | 12/19/2014  |            | PCT/US2014/071365  | PCT | ELECTRONIC FORM TO COLLECT A CLIENT REQUIREMENT ASSOCIATED WITH NETWORK TRAFFIC MANAGEMENT |
| 83213234     | Published   |               | 5/15/2013   |            | PCT/US2013/041069  | PCT | NANOCHANNEL ARRAY OF NANOWIRES FOR RESISTIVE MEMORY DEVICES                                |
| 83271024     | Published   |               | 4/486       |            | PCT/US2013/052813  | PCT | MEMRISTOR AND METHODS FOR MAKING THE SAME                                                  |
| 83623409     | Application |               | 41578       |            | PCT/US2013/067823  | PCT | THREE DIMENSIONAL RESISTIVE MEMORY ARCHITECTURES                                           |
| 83762922     | Published   |               | 41670       |            | PCT/US2014/014027  | PCT | DATA STORING IN MEMORY ARRAYS                                                              |
| 83763781     | Published   |               | 41670       |            | PCT/US2014/014219  | PCT | CONSTANT HAMMING WEIGHT CODING                                                             |
| 83777409     | Application |               | 41663       |            | PCT/US2014/013011  | PCT | MEMRISTOR MEMORY                                                                           |
| 83835225     | Application |               | 6/26/2014   |            | PCT/US2014/044265  | PCT | PROTECTIVE ELEMENTS FOR NON-VOLATILE MEMORY CELLS IN CROSSBAR ARRAYS                       |
| 83952883     | Application |               | 6/20/2014   |            | PCT/US2014/043445  | PCT | MEMRISTIVE MEMORY CELL RESISTANCE SWITCH MONITORING                                        |
| 84033066     | Application |               | 11/3/2014   |            | PCT/US2014/063667  | PCT | Device with Multiple Resistance Switches with Different Switching Characteristics          |
| 84111463     | Application |               | 3/26/2015   |            | PCT/US2015/022666  | PCT | CODE COMPARATORS                                                                           |
| 84111569     | Application |               | 42059       |            | PCT/US2015/017329  | PCT | DETERMINING A STATE OF MEMRISTORS IN A CROSSBAR ARRAY                                      |
| 84111606     | Application |               | 1/23/2015   |            | PCT/US2015/012746  | PCT | SENSING AN OUTPUT SIGNAL IN A CROSSBAR ARRAY                                               |
| 84114477     | Application |               | 1/29/2015   |            | PCT/US2015/013502  | PCT | TRANSPARENT MEMRISTIVE DEVICE                                                              |
| 84262403     | Application |               | 7/9/2015    |            | PCT/US2015/039711  | PCT | MEMORY ARRAY WITH BIT-CELLS TO ACCOMMODATE DIFFERENT NUMBERS AND TYPES OF MEMORY ELEMENTS  |
| 84269728     | Application |               | 7/30/2015   |            | PCT/US2015/042958  | PCT | MEMRISTIC RECORDING PIXELS                                                                 |

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| 83140525     | Published    |               | 1/14/2013   |            | PCT/US2013/021468  | PCT | WIRELESS TRANSMITTER TO OPTIMIZE THROUGHPUT BY CONTROLLING TIME-AVERAGE BLOCK SIZE OF RECEIVERS                              |
| 83140539     | Published    |               | 1/14/2013   |            | PCT/US2013/021497  | PCT | WIRELESSLY TRANSMITTING MULTI-CAST SIGNAL USING RATELESS CODES                                                               |
| 83207864     | Published    |               | 4/5/2013    |            | PCT/CN2013/073768  | PCT | KEYWORD SEARCH ON DATABASES                                                                                                  |
| 83501108     | Published    |               | 8/12/2013   |            | PCT/US2013/054589  | PCT | APPLICATION-AWARE NETWORK MANAGEMENT                                                                                         |
| 83627737     | Published    |               | 10/30/2013  |            | PCT/US2013/067532  | PCT | SIGNAL SPACE BASED NAVIGATION                                                                                                |
| 83763924     | Published    |               | 1/20/2014   |            | PCT/CN2014/070877  | PCT | An Infrastructure-guided Solution to Balance the Load among WLAN Access Points Using Basic Service Set Transition Management |
| 83822464     | Application  |               | 6/30/2014   |            | PCT/US2014/044916  | PCT | CHANNEL SCAN BASED ON MOBILITY STATE                                                                                         |
| 83822484     | Application  |               | 4/28/2014   |            | PCT/US2014/035621  | PCT | NETWORK FLOW CLASSIFICATION                                                                                                  |
| 83822524     | Application  |               | 4/30/2014   |            | PCT/CN2014/076597  | PCT | WIRELESS ACCESS POINT SELECTION BASED ON A CONNECTION PLAN                                                                   |
| 83957961     | Application  |               | 6/13/2014   |            | PCT/US2014/042332  | PCT | DETERMINING THE LOCATION OF A CLIENT DEVICE                                                                                  |
| 84220820     | Application  |               | 6/4/2015    |            | PCT/CN2015/080778  | PCT | A Model Transfer Method on Enabling WLAN Prediction Capability without Training                                              |
| 83200499     | Published    |               | 6/20/2013   |            | PCT/US2013/046842  | PCT | MODE-CONTROLLED LASER SYSTEM                                                                                                 |
| 83271047     | Published    |               | 7/30/2013   |            | PCT/US2013/052770  | PCT | LIQUID CRYSTAL COUPLED LIGHT MODULATION                                                                                      |
| 83623515     | Published    |               | 10/29/2013  |            | PCT/US2013/067342  | PCT | HIGH CONTRAST GRATING OPTOELECTRONICS                                                                                        |
| 83952906     | Application  |               | 8/15/2014   |            | PCT/US2014/051249  | PCT | OPTICAL MODE MATCHING                                                                                                        |
| 84033527     | Application  |               | 10/23/2014  |            | PCT/US2014/061953  | PCT | OPTICAL PORT-SHUFFLING MODULE                                                                                                |
| 84033607     | Application  |               | 10/31/2014  |            | PCT/US2014/063337  | PCT | CABLE STORAGE MODULE                                                                                                         |
| 84033630     | Application  |               | 11/25/2014  |            | PCT/US2014/067379  | PCT | LIGHT REDIRECTING TEST FIXTURE                                                                                               |
| 84111523     | Application  |               | 3/19/2015   |            | PCT/US2015/021412  | PCT | TRANSCIEVER NODES COUPLED TO ARRAYED WAVEGUIDE GRATINGS                                                                      |
| 84262752     | Application  |               | 9/3/2015    |            | PCT/US2015/048365  | PCT | Defect-free heterogeneous substrate                                                                                          |
| 84312845     | Application  |               | 7/31/2015   |            | PCT/US2015/043078  | PCT | OPTICAL RECEIVERS                                                                                                            |
| 90066005     | Acknowledged |               |             |            |                    | PCT | PRECISE SIGNAL PROPAGATION CONTROL FOR SEGMENTED MZM TRANSMITTERS -UHU                                                       |
| 84170438     | Application  |               | 8/5/2015    |            | PCT/US2015/043786  | PCT | SELECTING HARDWARE COMBINATIONS                                                                                              |
| 84276904     | Application  |               | 6/30/2015   |            | PCT/US2015/038499  | PCT | INTEROPERABILITY-AS-A-SERVICE IN A CLOUD ENVIRONMENT                                                                         |
| 83764316     | Application  |               | 1/16/2014   |            | PCT/US2014/011911  | PCT | CONFIGURABLE WORKLOAD OPTIMIZATION                                                                                           |
| 84264690     | Application  |               | 8/12/2015   |            | PCT/US2015/044752  | PCT | INTELLIGENT LOGGING                                                                                                          |
| 83832806     | Application  |               | 4/18/2014   |            | PCT/US2014/034709  | PCT | PRE-COGNITIVE SECURITY INFORMATION AND EVENT MANAGEMENT                                                                      |
| 83958757     | Application  |               | 7/31/2014   |            | PCT/US2014/049232  | PCT | SECURE BIOS PASSWORD METHOD IN SERVER COMPUTER                                                                               |
| 84042850     | Application  |               | 2/10/2015   |            | PCT/US2015/015296  | PCT | CHIPSET RECONFIGURATION BASED ON DEVICE DETECTION                                                                            |

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| 84171357     | Application  |               | 4/17/2015   |            | PCT/US2015/026428  | PCT | FIRMWARE MAP DATA                                                                                                                                                        |
| 84171434     | Application  |               | 5/6/2015    |            | PCT/US2015/029453  | PCT | SECURELY AND RELIABLY TRANSFERRING STARTUP SCRIPTS                                                                                                                       |
| 84172997     | Application  |               | 4/17/2015   |            | PCT/US2015/026509  | PCT | ADDING A NETWORK UNIT TO A MANAGEMENT GROUP                                                                                                                              |
| 84263044     | To Be Filed  |               |             |            |                    | PCT | Unifying Test Automation Framework able to easily adapt to changing tools, tests, and hardware configurations and consolidate disparate test methods and infrastructures |
| 90033124     | Application  |               | 9/17/2015   |            | PCT/US2015/050657  | PCT | OBSCURATION OF A CACHE SIGNAL                                                                                                                                            |
| 90035288     | Acknowledged |               |             |            |                    | PCT | Method to securely queue and dispatch server deployment operations through a REST interface on a system BMC                                                              |
| 90037930     | Application  |               | 9/18/2015   |            | PCT/US2015/051035  | PCT | FIRMWARE UPDATE PACKAGES                                                                                                                                                 |
| 83593465     | Published    |               | 4/17/12     |            | PCT/US2014/029046  | PCT | COLUMN STORE DATABASE COMPRESSION                                                                                                                                        |
| 83961004     | Application  |               | 7/28/2014   |            | PCT/US2014/048341  | PCT | SEARCHING RELATIONAL AND GRAPH DATABASES                                                                                                                                 |
| 90035199     | Acknowledged |               |             |            |                    | PCT | Efficient polygon distance computation using PM quadtree decomposition and distance-based exploration                                                                    |
| 90060781     | Application  |               | 9/25/2015   |            | PCT/US2015/052277  | PCT | QUERIES BASED ON RANGES OF HASH VALUES                                                                                                                                   |
| 83822444     | Application  |               | 4/7/2014    |            | PCT/US2014/033136  | PCT | CONDITIONALLY PURCHASING CLOUD SERVICES                                                                                                                                  |
| 84263090     | Acknowledged |               |             |            |                    | PCT | Dynamic Workload Management For High-Volume Business Transactions in the Cloud                                                                                           |
| 84279695     | Application  |               | 8/4/2015    |            | PCT/CN2015/086047  | PCT | LOAD TESTING BASED ON NETWORK VIRTUALIZATION USING A CONTAINER                                                                                                           |
| 84170481     | Application  |               | 4/29/2015   |            | PCT/US2015/028248  | PCT | INHIBITTING A PENETRATION ATTACK                                                                                                                                         |
| 84264670     | Application  |               | 6/18/2015   |            | PCT/US2015/036318  | PCT | RANDOMIZED HEAP ALLOCATION                                                                                                                                               |
| 83210529     | Published    |               | 7/1/2013    |            | PCT/US2013/048901  | PCT | LOOKUP OF A DATA STRUCTURE CONTAINING A MAPPING BETWEEN A VIRTUAL ADDRESS SPACE AND A PHYSICAL ADDRESS SPACE                                                             |
| 83271860     | Published    |               | 7/31/2013   |            | PCT/US2013/053060  | PCT | LOG ANALYSIS                                                                                                                                                             |
| 83272544     | Published    |               | 4/18/6      |            | PCT/US2013/052922  | PCT | OPERATING A MEMORY UNIT                                                                                                                                                  |
| 83764256     | Published    |               | 2/27/2014   |            | PCT/US2014/018886  | PCT | COMMUNICATION BETWEEN INTEGRATED GRAPHICS PROCESSING UNITS                                                                                                               |
| 83821090     | Application  |               | 4/18/48     |            | PCT/US2014/048500  | PCT | Memory Access Control                                                                                                                                                    |
| 83830499     | Application  |               | 4/25/2014   |            | PCT/US2014/035532  | PCT | CONFIGURATION BASED ON A BLUEPRINT                                                                                                                                       |
| 83830519     | Application  |               | 4/23/2014   |            | PCT/US2014/035101  | PCT | SELECTING A PLATFORM CONFIGURATION FOR A WORKLOAD                                                                                                                        |
| 83953178     | Application  |               | 7/22/2014   |            | PCT/US2014/047707  | PCT | NODE-BASED COMPUTE DEVICE WITH PROTOCOL-BASED PRIORITY                                                                                                                   |
| 83957709     | Application  |               | 4/18/48     |            | PCT/US2014/048403  | PCT | MULTI-CORE PROCESSOR INCLUDING A MASTER CORE AND SLAVE CORES                                                                                                             |

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| 83958233     | Application  |               | 9/30/2014   |            | PCT/US2014/058381  | PCT | PAGE MODIFICATION                                                                                                                                                             |
| 84037102     | Application  |               | 1/29/2015   |            | PCT/US2015/013602  | PCT | TRANSACTONAL KEY-VALUE STORE                                                                                                                                                  |
| 84113733     | Application  |               | 42034       |            | PCT/US2015/013748  | PCT | MODIFYING CHARACTERISTICS OF A MEMORY SEGMENT                                                                                                                                 |
| 84113793     | Application  |               | 1/30/2015   |            | PCT/US2015/013882  | PCT | MEMORY-DRIVEN OUT-OF-BAND MANAGEMENT                                                                                                                                          |
| 84113810     | Application  |               | 4/30/2015   |            | PCT/US2015/028576  | PCT | RETRIEVE DATA BLOCK FROM DETERMINED DEVICES                                                                                                                                   |
| 84173584     | Application  |               | 4/30/2015   |            | PCT/US2015/028418  | PCT | MAPPING APERTURES OF DIFFERENT SIZES                                                                                                                                          |
| 90030662     | Acknowledged |               |             |            |                    | PCT | A high capacity and high performance persistent memory system based on DRAM, high-performance non-volatile memory technology and high-capacity non-volatile memory technology |
|              |              |               |             |            |                    |     |                                                                                                                                                                               |
| 90034160     | Application  |               | 9/10/2015   |            | PCT/US2015/049304  | PCT | REQUEST OF AN MCS LOCK BY GUESTS                                                                                                                                              |
| 90037764     | To Be Filed  |               |             |            |                    | PCT | STASH: Flush-on-failure for The Machine's CPU Registers                                                                                                                       |
| 84115038     | Application  |               | 2/26/2015   |            | PCT/US2015/017811  | PCT | UPDATING FIRMWARE IMAGES                                                                                                                                                      |
| 83820984     | Application  |               | 5/30/2014   |            | PCT/US2014/040285  | PCT | DETERMINE EDGE SWITCH BASED ON NETWORK TRAFFIC                                                                                                                                |
| 83822630     | Application  |               | 3/28/2014   |            | PCT/US2014/032155  | PCT | RESCHEDULING A SERVICE ON A NODE                                                                                                                                              |
| 83852640     | Application  |               | 4/3/2014    |            | PCT/US2014/032875  | PCT | MODIFYING A PRIORITY FOR AT LEAST ONE FLOW CLASS OF AN APPLICATION                                                                                                            |
| 83874446     | Application  |               | 3/31/2014   |            | PCT/US2014/032344  | PCT | REDIRECTING CONNECTION REQUESTS IN A NETWORK                                                                                                                                  |
| 83954941     | Application  |               | 6/30/2014   |            | PCT/US2014/044784  | PCT | INJECT PROBE TRANSMISSION TO DETERMINE NETWORK ADDRESS CONFLICT                                                                                                               |
| 84111875     | Application  |               | 2/12/2015   |            | PCT/US2015/015588  | PCT | MONITORING DYNAMIC DEVICE CONFIGURATION PROTOCOL OFFERS TO DETERMINE ANOMALY                                                                                                  |
| 84111921     | Application  |               | 4/1/2015    |            | PCT/US2015/023918  | PCT | PACKET HEADERS WITH DEVICE-EXTRINSIC INFORMATION                                                                                                                              |
| 84111964     | Application  |               | 1/30/2015   |            | PCT/US2015/013703  | PCT | SENDING INFORMATION IN A NETWORK CONTROLLED BY A CONTROLLER                                                                                                                   |
| 84152854     | Application  |               | 2/10/2015   |            | PCT/US2015/015122  | PCT | NETWORK POLICY CONFLICT DETECTION AND RESOLUTION                                                                                                                              |
| 84172436     | Application  |               | 6/26/2015   |            | PCT/US2015/038048  | PCT | SERVER LOAD BALANCING                                                                                                                                                         |
| 84031360     | Application  |               | 10/27/2014  |            | PCT/US2014/062374  | PCT | BACKUP POWER COMMUNICATION                                                                                                                                                    |
| 84031383     | Application  |               | 41943       |            | PCT/US2014/063416  | PCT | COMBINED BACKUP POWER                                                                                                                                                         |
| 84042830     | Application  |               | 1/12/2015   |            | PCT/US2015/011057  | PCT | SELECTIVELY ENABLING LOADS USING A BACKUP POWER SUPPLY                                                                                                                        |
| 84042867     | Application  |               | 41905       |            | PCT/US2014/056943  | PCT | DUAL IN-LINE MEMORY MODULE (DIMM) FORM FACTOR BACKUP POWER SUPPLY                                                                                                             |
| 84262543     | Acknowledged |               |             |            |                    | PCT | A novel idea to control bypass semiconductor switches in a distributed energy system (DES)                                                                                    |
| 84263070     | Application  |               | 9/21/2015   |            | PCT/US2015/051258  | PCT | SERVER NODE SHUTDOWN                                                                                                                                                          |
| 83747133     | Application  |               | 2/14/2014   |            | PCT/US2014/016545  | PCT | CONTROLLING IMPEDANCE OF BLANK CARTRIDGES                                                                                                                                     |
| 84033550     | Application  |               | 2/17/2015   |            | PCT/US2015/016141  | PCT | FLUID MANIFOLD                                                                                                                                                                |
| 84114981     | Application  |               | 1/30/2015   |            | PCT/US2015/013977  | PCT | SCALABLE COOLANT DISTRIBUTION UNIT                                                                                                                                            |

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| 90037950     | To Be Filed |               |             |            |                    | PCT | Server primarily cooled by air system and augmented by water backup system during emergency or heavy use         |
| 83958070     | Application |               | 6/2/2014    |            | PCT/US2014/040512  | PCT | WAYPOINT NAVIGATOR                                                                                               |
| 84111480     | Application |               | 1/30/2015   |            | PCT/US2015/013738  | PCT | ROOM CAPTURE AND PROJECTION                                                                                      |
| 83268654     | Published   |               | 8/30/2013   |            | PCT/US2013/057494  | PCT | COMPARING REAL-TIME MOVEMENTS TO PATTERN PROFILES                                                                |
| 83269381     | Published   |               | 8/30/2013   |            | PCT/US2013/057514  | PCT | BACKGROUND                                                                                                       |
| 83820323     | Application |               | 3/31/2014   |            | PCT/US2014/032388  | PCT | CONTEXTUAL SEARCHES FOR DOCUMENTS                                                                                |
| 84029886     | Application |               | 1/29/2015   |            | PCT/US2015/013565  | PCT | RULE BASED DELAYED MESSAGE DELIVERY                                                                              |
| 84030865     | Application |               | 12/22/2014  |            | PCT/US2014/071795  | PCT | APPLYING RULES TO A DEVICE FROM A SERVICE DETECTED BY THE DEVICE                                                 |
| 82579300     | Granted     | 1749386       | 5/4/2005    | 40282      | 5746753.2          | PL  | EXECUTION OF INTERACTION FLOWS                                                                                   |
| 82579358     | Granted     | 2419986       | 4/3/2007    | 40690      | 2008143372         | RU  | Pattern Discovery In A Network Security System                                                                   |
| 82579375     | Granted     | 2425449       | 39380       | 40751      | 2009107162         | RU  | Merging Multi-Line Log Entries                                                                                   |
| 82579394     | Granted     | 2417417       | 10/25/2007  | 40660      | 2009107080         | RU  | Tracking Changing State Data To Assist In Computer Network Security                                              |
| 82934557     | Application |               | 1/30/2012   |            | 2012103312         | RU  | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security |
| 82579550     | Granted     | 2424568       | 12/28/2007  | 40744      | 2009128959         | RU  | TEXT DETECTION IN IMAGES OF GRAPHICAL USER INTERFACES                                                            |
| 82201814     | Granted     | 1708459       | 3/29/2005   | 39680      | 5300226.7          | SE  | Storing Log Data Efficiently While Supporting Querying To Assist in Computer Network Security                    |
| 82991033     | Granted     | 1725065       | 38848       | 41052      | 6113818.6          | SE  | Routing Element With Special Functions                                                                           |
| 82181063     | Granted     | 532972        | 6/3/2005    | 40323      | 0501276-0          | SE  | Controlling Access To Communication Services                                                                     |
| 82066868     | Granted     | 815677        | 1/17/1997   | 38427      | 97900685.5         | SE  | Telecommunications System And Method For Forwarding Messages Based Upon Subscriber Identification Information    |
| 82133609     | Granted     | 1188339       | 6/23/2000   | 38315      | 943160.2           | SE  | Multicarrier Communication System And Method For Peak Power Control                                              |
| 82198601     | Granted     | 1686813       | 1/31/2005   | 39645      | 5300075.8          | SE  | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS          |
| 82910733     | Granted     | 2039121       | 7/10/2007   | 40898      | 7787337            | SE  | Signalling Point                                                                                                 |
| 82180769     | Granted     | 112909        | 8/11/2004   | 39294      | 200404407-9        | SG  | METHOD OF PROVIDING SERVICES IN A NETWORK, NETWORK ELEMENT                                                       |
| 82209065     | Granted     | 125251        | 3/10/2005   | 39689      | 200600895-7        | SG  | Circuit Tester Interface                                                                                         |
| 82579395     | Granted     | 150226        | 10/25/2007  | 40816      | 2009011180         | SG  | Server System, Server Device And Method Therefor                                                                 |
|              |             |               |             |            |                    |     | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security |

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| 82133309     | Granted | 122056        | 10/31/2005  | 39538      | 200508486-8        | SG | Copy Operations In Storage Networks                                                        |
| 82201361     | Granted | 121963        | 10/12/2005  | 7/31/2008  | 200506484-5        | SG | Recovery Operations In Storage Networks                                                    |
| 82116893     | Granted | 65885         | 12/8/1997   | 5/31/2005  | 9902484-6          | SG | PUBLIC KEY CRYPTOGRAPHIC APPARATUS AND METHOD                                              |
| 82233758     | Granted | 158389        | 5/21/2008   | 11/15/2010 | 201000203-8        | SG | TAMPER-EVIDENT CONNECTOR                                                                   |
| 82579359     | Granted | 146862        | 4/3/2007    | 9/30/2009  | 200807443-7        | SG | Merging Multi-Line Log Entries                                                             |
| 82579307     | Granted | 127094        | 5/4/2005    | 39933      | 200607520-4        | SG | Pattern Discovery In A Network Security System                                             |
| 82948048     | Granted | 85502         | 6/30/2000   | 1/31/2005  | 200107639-7        | SG | System and Method for Capturing and Managing Information from Digital Source               |
| 81969821     | Granted | 1255678       | 12/11/2002  | 5/21/2006  | 91135858           | TW | Optimized Conductor Routing For Multiple Components On A Printed Circuit Board             |
| 81978497     | Granted | 588240        | 11/22/2001  | 5/21/2004  | 90128966           | TW | Self-Healing Memory                                                                        |
| 81987941     | Granted | 552513        | 10/15/2001  | 9/11/2003  | 90125426           | TW | A Device And Method For Connecting A Plurality Of Peripherals On A Bus                     |
| 82007399     | Granted | 1229719       | 10/31/2002  | 3/21/2005  | 91132290           | TW | Rack Latch Assembly                                                                        |
| 82082714     | Granted | 1281333       | 8/26/2003   | 5/11/2007  | 92123436           | TW | Systems And Methods For Remote Testing Of Printing Devices                                 |
| 82092683     | Granted | 1312058       | 4/13/2004   | 7/11/2009  | 93110223           | TW | High Performance Cooling Device With Vapor Chamber                                         |
| 82102307     | Granted | 1221909       | 5/20/2003   | 10/11/2004 | 92113583           | TW | System And Method Of Measuring Low Impedances                                              |
| 82105178     | Granted | 1308760       | 11/25/2003  | 4/11/2009  | 92133048           | TW | Systems And Methods For Providing Error Correction Code Testing Functionality              |
| 82127459     | Granted | 312765        | 1/11/1997   | 8/11/1997  | 86100253           | TW | BUS ERROR HANDLER FOR PERR# & SERR# ON DUAL PCI BUS SYSTEM                                 |
| 82179518     | Granted | 1417891       | 5/23/2006   | 12/1/2013  | 95118230           | TW | Memory Mirroring Apparatus And Method                                                      |
| 82180649     | Granted | 1383294       | 4/25/2005   | 1/21/2013  | 94113113           | TW | Passing Identification Information                                                         |
| 82180772     | Granted | 1324688       | 7/16/2004   | 5/11/2010  | 93121293           | TW | Circuit Tester Interface                                                                   |
| 82182287     | Granted | 1295772       | 12/12/2005  | 4/11/2008  | 94143869           | TW | System And Method For Data Analysis                                                        |
| 82184516     | Granted | 1376596       | 10/13/2005  | 11/11/2012 | 94135684           | TW | Systems And Methods Of Test Case Generation With Feedback                                  |
| 82185329     | Granted | 1394257       | 4/1/2005    | 4/21/2013  | 94110469           | TW | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures    |
| 82189949     | Granted | 1378347       | 6/30/2005   | 12/1/2012  | 94122084           | TW | Purging Without Write-back Of Cache Lines Containing Spent Data                            |
| 82204073     | Granted | 1400862       | 4/25/2006   | 7/1/2013   | 95114691           | TW | Cooling Fan With An Outer Rotor Motor                                                      |
| 82209755     | Granted | 1441022       | 6/8/2006    | 6/11/2014  | 95120393           | TW | Policy Based Cryptographic Application Programming Interface In Secure Memory              |
| 82233734     | Granted | 1438967       | 6/25/2008   | 5/21/2014  | 97123670           | TW | TAMPER-EVIDENT CONNECTOR                                                                   |
| 82240826     | Granted | 1463293       | 4/23/2009   | 12/1/2014  | 98113451           | TW | POWER SUPPLY ASSEMBLY FOR SERVER RACK AND METHOD FOR MOUNTING POWER SUPPLY FOR SERVER RACK |
| 82242959     | Granted | 1467374       | 9/8/2008    | 1/1/2015   | 97134381           | TW | Protected Portion Of Partition Memory For Computer Code                                    |

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| 82245509     | Granted   | 1450269       | 7/1/2009    | 8/21/2014  | 98122217           | TW | Gearred Latch Apparatus                                                                                                                     |
| 82248569     | Granted   | 1489759       | 3/29/2010   | 6/21/2015  | 99109387           | TW | Electric Power Conversion System Having An Adaptable Transformer Turns Ratio For Improved Efficiency                                        |
| 82249439     | Allowed   |               | 2/22/2010   |            | 99105001           | TW | DYNAMIC IMPEDANCE PHOTODETECTOR RECEIVER CIRCUIT                                                                                            |
| 82249763     | Granted   | 1454932       | 9/23/2009   | 10/1/2014  | 98132061           | TW | Managing Latencies In A Multiprocessor Interconnect                                                                                         |
| 82250012     | Published |               | 3/29/2010   |            | 99109376           | TW | OPTICAL MEMORY EXPANSION                                                                                                                    |
| 82250126     | Granted   | 1496301       | 3/30/2010   | 8/11/2015  | 99109578           | TW | PHOTONIC DEVICE AND METHOD OF MAKING THE SAME                                                                                               |
| 82250456     | Published |               | 2/25/2010   |            | 99105459           | TW | GRID HEAT SINK                                                                                                                              |
| 82257812     | Published |               | 5/26/2010   |            | 99116816           | TW | CAPACITIVE CROSSBAR ARRAYS                                                                                                                  |
| 82257821     | Granted   | 1497648       | 3/24/2010   | 8/21/2015  | 99108679           | TW | THREE DIMENSIONAL MULTILAYER CIRCUIT                                                                                                        |
| 82258190     | Granted   | 1497785       | 8/12/2010   | 8/21/2015  | 99126902           | TW | TWO TERMINAL MEMCAPACITOR DEVICE                                                                                                            |
| 82258199     | Published |               | 5/26/2010   |            | 99116818           | TW | HIERARCHICAL ON-CHIP MEMORY                                                                                                                 |
| 82258205     | Published |               | 7/6/2010    |            | 99122146           | TW | THERMALLY STABLE NANOSCALE SWITCHING DEVICE                                                                                                 |
| 82258253     | Published |               | 8/12/2010   |            | 99126898           | TW | LOW-POWER NANOSCALE SWITCHING DEVICE WITH AN AMORPHOUS SWITCHING MATERIAL                                                                   |
| 82258262     | Published |               | 5/27/2010   |            | 99116992           | TW | SWITCHABLE JUNCTION WITH INTRINSIC DIODES WITH DIFFERENT SWITCHING THRESHOLDS                                                               |
| 82258271     | Allowed   |               | 7/12/2010   |            | 99122820           | TW | MEMRISTIVE DEVICE                                                                                                                           |
| 82258313     | Published |               | 5/27/2010   |            | 99116995           | TW | Memristive Adaptive Resonance Networks                                                                                                      |
| 82258319     | Published |               | 7/22/2010   |            | 99124135           | TW | NON-VOLATILE DATA-STORE LATCH                                                                                                               |
| 82258373     | Published |               | 7/27/2010   |            | 99124716           | TW | MEMRISTORS WITH ASYMMETRIC ELECTRODES                                                                                                       |
| 82258823     | Granted   | 1473012       | 10/14/2010  | 2/11/2015  | 99135050           | TW | Multiprocessing Computing With Distributed Embedded Switching                                                                               |
| 82259501     | Published |               | 8/13/2010   |            | 99127099           | TW | MULTILAYER CIRCUIT                                                                                                                          |
| 82259576     | Published |               | 10/13/2010  |            | 99134873           | TW | PARALLELIZED CHECK POINTING USING Mats AND THROUGH SILICON Vias (tsvs)                                                                      |
| 82260878     | Published |               | 8/10/2010   |            | 99126612           | TW | MEMRISTORS BASED ON MIXED-METAL-VALENCE COMPOUNDS                                                                                           |
| 82274810     | Granted   | 1430613       | 1/10/2007   | 3/11/2014  | 96100939           | TW | Bi-planar Network Architecture                                                                                                              |
| 82274852     | Granted   | 1452870       | 9/10/2007   | 41893      | 96133721           | TW | Network Traffic Redirection in Bi-Planar Networks                                                                                           |
| 82275302     | Granted   | 351882        | 8/7/1996    | 36192      | 85109575           | TW | Method and Apparatus For Wavelet Based Data Compression Having Adaptive Bit Rate Control For Compression Of Digital Audio Or Other Sensor   |
| 82579360     | Granted   | 1312624       | 3/30/2007   | 7/21/2009  | 96111414           | TW | Merging Multi-Line Log Entries                                                                                                              |
| 82579423     | Granted   | 1498757       | 5/28/2010   | 9/1/2015   | 99117385           | TW | Specifying a Parser Using a Properties File                                                                                                 |
| 82579429     | Granted   | 1498752       | 9/13/2010   | 42248      | 99130885           | TW | Extracting Information From Unstructured Data And Mapping The Information To A Structured Schema Using The Naïve Bayesian Probability Model |
| 82579435     | Granted   | 1480746       | 11/9/2010   | 42105      | 99138570           | TW | Enabling Full-Text Searching Using A Structured Data Store                                                                                  |

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| 82579552     | Granted   | 1434190       | 12/28/2007  | 41740      | 96150901           | TW | Storing Log Data Efficiently While Supporting Querying                                                             |
| 82580974     | Granted   | 1430103       | 12/9/2010   | 41709      | 99143002           | TW | Assist In Computer Network Security                                                                                |
| 82581001     | Granted   | 1429975       | 12/15/2010  | 41740      | 99143970           | TW | Fair Token Arbitration Systems And Methods                                                                         |
| 82629493     | Granted   | 1433314       | 1/27/2011   | 41730      | 100103073          | TW | OPTICAL INTERCONNECT                                                                                               |
| 82635856     | Granted   | 1483498       | 1/31/2011   | 42125      | 100103685          | TW | CONTROLLED SWITCHING MEMRISTOR                                                                                     |
| 82635885     | Granted   | 1444681       | 1/31/2011   | 41831      | 100103671          | TW | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER ARRAYS                                                            |
| 82635896     | Granted   | 1477810       | 1/31/2011   | 3/21/2015  | 100103688          | TW | GRATING-BASED OPTICAL FIBER-TO-WAVEGUIDE INTERCONNECTS                                                             |
| 82654425     | Granted   | 1447453       | 2/25/2011   | 41852      | 100106450          | TW | OPTICAL DEVICES BASED ON NON-PERIODIC SUB-WAVELENGTH GRATINGS                                                      |
| 82660162     | Granted   | 1486641       | 3/14/2011   | 42156      | 100108519          | TW | OPTICAL STAR COUPLER                                                                                               |
| 82660167     | Granted   | 1477838       | 3/16/2011   | 42084      | 100108904          | TW | CONTROLLING PHASE RESPONSE IN A SUB-WAVELENGTH GRATING LENS                                                        |
| 82660181     | Granted   | 1497659       | 3/14/2011   | 8/21/2015  | 100108529          | TW | DEVICE AND METHOD FOR CONVERTING SIGNAL AND METHOD OF MANUFACTURING SAID DEVICE                                    |
| 82662242     | Granted   | 1480885       | 3/11/2011   | 4/11/2015  | 100108333          | TW | CIRCUIT MODULE                                                                                                     |
| 82715613     | Allowed   |               | 4/18/2011   |            | 100113369          | TW | INTERCONNECTION ARCHITECTURE FOR MEMORY STRUCTURES                                                                 |
| 82727174     | Granted   | 1441476       | 4/29/2011   | 6/11/2014  | 100115092          | TW | SWITCHING IN A NETWORK DEVICE                                                                                      |
| 82788345     | Published |               | 7/29/2011   |            | 100127017          | TW | Method For Routing Data Packets In A Fat Tree Network                                                              |
| 82861417     | Granted   | 1429152       | 10/25/2011  | 3/1/2014   | 100138678          | TW | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                                             |
| 82914193     | Granted   | 1467254       | 1/11/2012   | 1/1/2015   | 101101088          | TW | VERTICAL-CAVITY SURFACE-EMITTING LASER SYSTEM AND METHOD FOR FABRICATING THE SAME                                  |
| 82914216     | Granted   | 1480606       | 1/11/2012   | 4/11/2015  | 101101087          | TW | COMPOSITE PROCESSORS                                                                                               |
| 82997522     | Published |               | 5/9/2012    |            | 101116488          | TW | WAVEFRONT SYNTHESIZER SYSTEMS                                                                                      |
| 83050532     | Allowed   |               | 7/13/2012   |            | 101125299          | TW | SHIFTABLE MEMORY                                                                                                   |
| 83051101     | Published |               | 7/19/2012   |            | 101126023          | TW | MEMRISTORS HAVING MIXED OXIDE PHASES                                                                               |
| 83052830     | Granted   | 1498894       | 7/20/2012   | 9/1/2015   | 101126305          | TW | MEMRISTOR STRUCTURE WITH A DOPANT SOURCE                                                                           |
| 83057100     | Published |               | 7/26/2012   |            | 101127017          | TW | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                                            |
| 83057118     | Granted   | 1489480       | 7/26/2012   | 6/21/2015  | 101127021          | TW | Method and System for Reducing Write-Buffer Capacities within Memristor-Based Data-Storage Devices                 |
|              |           |               |             |            |                    |    | Efficient Data-Storage Devices that Include Memory Elements Characterized by Potentially Large Switching Latencies |
| 83109709     | Published |               | 10/11/2012  |            | 101137432          | TW | SELECT DEVICE FOR CROSS POINT MEMORY STRUCTURES                                                                    |
| 83119528     | Granted   | 1497852       | 10/23/2012  | 8/21/2015  | 101139063          | TW | DIRECT MODULATED LASER                                                                                             |
| 83123489     | Granted   | 1467368       | 10/24/2012  | 1/1/2015   | 101139278          | TW | DRIVE CARRIER LIGHT SOURCE CONTROL                                                                                 |

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| 83123495     | Granted   | 149347        | 10/24/2012  | 7/21/2015  | 101139277          | TW | DEVICE AUTHENTICATION                                                                    |
| 83123512     | Granted   | 1454918       | 10/24/2012  | 10/1/2014  | 101139268          | TW | DISTRIBUTED MANAGEMENT                                                                   |
| 83123524     | Granted   | 1481917       | 11/5/2012   | 42115      | 101140977          | TW | OPTICAL BLIND-MATE CONNECTOR                                                             |
| 83127883     | Granted   | 1493664       | 10/29/2012  | 7/21/2015  | 101139947          | TW | DEVICES INCLUDING A DIAMOND LAYER                                                        |
| 83127984     | Allowed   |               | 10/31/2012  |            | 101140336          | TW | KEYING SOLUTION, DRIVE CARRIER AND DRIVE SYSTEM                                          |
| 83140063     | Granted   | 1487223       | 12/19/2012  | 6/1/2015   | 101148278          | TW | HIGH DENSITY LASER OPTICS                                                                |
| 83153018     | Published |               | 1/9/2013    |            | 102100702          | TW | SINGLE AND DOUBLE CHIP SPARE                                                             |
| 83167068     | Published |               | 1/28/2013   |            | 102103085          | TW | MONOLITHICALLY INTEGRATED, SELF-ALIGNING, OPTICAL FIBER FERRULE                          |
| 83196851     | Granted   | 1493457       | 2/22/2013   | 42206      | 102106151          | TW | Firmware Package to Modify Active Firmware                                               |
| 83224806     | Allowed   |               | 4/23/2013   |            | 102114416          | TW | DYNAMIC MEMORY ALLOCATION                                                                |
| 83234040     | Granted   | 1498624       | 4/26/2013   | 42248      | 102114985          | TW | Hybrid MOS Optical Modulator                                                             |
| 83260546     | Published |               | 5/17/2013   |            | 102117569          | TW | DEVICES INCLUDING INDEPENDENTLY CONTROLLABLE ABSORPTION REGION AND MULTIPLICATION REGION |
|              |           |               |             |            |                    |    | ELECTRIC FIELDS                                                                          |
| 83262442     | Allowed   |               | 5/20/2013   |            | 102117744          | TW | LOCAL ERROR DETECTION AND GLOBAL ERROR CORRECTION                                        |
| 83278348     | Published |               | 6/21/2013   |            | 102122177          | TW | NETWORK TRAFFIC PROCESSING SYSTEM                                                        |
| 83410823     | Published |               | 6/26/2013   |            | 102122711          | TW | SYSTEM AND METHOD FOR OPERATING SYSTEM AGNOSTIC HARDWARE VALIDATION                      |
| 83416822     | Published |               | 6/24/2013   |            | 102122379          | TW | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                               |
| 83417392     | Published |               | 7/11/2013   |            | 102124890          | TW | PERFORMING REFRESH OF A MEMORY DEVICE IN RESPONSE TO ACCESS OF DATA                      |
| 83417781     | Published |               | 6/27/2013   |            | 102122921          | TW | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                                              |
| 83423712     | Published |               | 7/24/2013   |            | 102126472          | TW | COOLING ASSEMBLY                                                                         |
| 83425461     | Published |               | 7/24/2013   |            | 102126480          | TW | NOTIFICATION OF ADDRESS RANGE INCLUDING NON-CORRECTABLE ERROR                            |
| 83501119     | Published |               | 8/12/2013   |            | 102128842          | TW | TRANS-IMPEDANCE AMPLIFIERS (TIA) THERMALLY ISOLATED FROM OPTICAL MODULES                 |
| 83553704     | Published |               | 8/22/2013   |            | 102130038          | TW | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                           |
| 83597969     | Published |               | 9/4/2013    |            | 102131830          | TW | ROBUST HARDWARE FAULT MANAGEMENT SYSTEM, METHOD AND FRAMEWORK FOR ENTERPRISE DEVICES     |
| 83695193     | Published |               | 9/30/2013   |            | 102135331          | TW | DYNAMICALLY SELECTING BETWEEN MEMORY ERROR DETECTION AND MEMORY ERROR CORRECTION         |
| 83695862     | Published |               | 10/3/2013   |            | 102136016          | TW | MODULAR RACK SYSTEM                                                                      |
| 83700251     | Published |               | 10/16/2013  |            | 102137300          | TW | Selective Error Correcting Code and Memory Access Granularity Switching                  |
| 83729205     | Granted   | 1497253       | 11/14/2013  | 42237      | 102141431          | TW | POWER FACTOR CORRECTOR POWER SHARING                                                     |
| 83734397     | Published |               | 12/4/2013   |            | 102144398          | TW | LIQUID COOLING                                                                           |

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| 83748601     | Published |               | 12/9/2013   |            | 102145162          | TW | NVRAM PATH SELECTION                                                                                          |
| 83748606     | Published |               | 12/6/2013   |            | 102144861          | TW | APPLICATION SERVER TO NVRAM PATH                                                                              |
| 83748644     | Allowed   |               | 12/9/2013   |            | 102145163          | TW | ASSIGNING PROCESSORS TO MEMORY MAPPED CONFIGURATION                                                           |
| 83748660     | Published |               | 12/9/2013   |            | 102145165          | TW | RAM REFRESH RATE                                                                                              |
| 83764192     | Published |               | 11/29/2013  |            | 102143835          | TW | MEMORY CONTROLLERS TO FORM SYMBOLS BASED ON BURSTS                                                            |
| 83768993     | Published |               | 12/18/2013  |            | 102146933          | TW | NON-VOLATILE MULTI-LEVEL-CELL MEMORY WITH DECOUPLED BITS FOR HIGHER PERFORMANCE AND ENERGY EFFICIENCY         |
| 83782149     | Allowed   |               | 1/22/2014   |            | 103102300          | TW | NON-VOLATILE MEMORY WRITE MECHANISM                                                                           |
| 83789052     | Published |               | 1/24/2014   |            | 103102680          | TW | MEMORY MODULE CONTROLLER SUPPORTING EXTENDED WRITES                                                           |
| 83810423     | Allowed   |               | 2/19/2014   |            | 103105494          | TW | Implementing Coherency with Reflective Memory                                                                 |
| 83811360     | Published |               | 2/18/2014   |            | 103105258          | TW | Cartridge Interdependence Switch                                                                              |
| 83811374     | Published |               | 2/21/2014   |            | 103105883          | TW | External Memory Controller                                                                                    |
| 83813068     | Published |               | 2/19/2014   |            | 103105499          | TW | STATE-RETAINING LOGIC CELL                                                                                    |
| 83813097     | Published |               | 2/24/2014   |            | 103106073          | TW | Memory Access Rate                                                                                            |
| 83832410     | Published |               | 3/13/2014   |            | 103109090          | TW | TOP LOADING CARTRIDGE                                                                                         |
| 83832453     | Published |               | 3/13/2014   |            | 103109091          | TW | TOP LOADING CARTRIDGE                                                                                         |
| 83835258     | Published |               | 3/10/2014   |            | 103108108          | TW | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                   |
| 83853206     | Granted   | 1497318       | 3/19/2014   | 42237      | 103110306          | TW | IDENTIFYING MEMORY OF A BLADE DEVICE FOR USE BY AN OPERATING SYSTEM OF A PARTITION INCLUDING THE BLADE DEVICE |
| 83853211     | Published |               | 3/20/2014   |            | 103110499          | TW | ERROR COORDINATION MESSAGE FOR A BLADE DEVICE HAVING A LOGICAL PROCESSOR IN ANOTHER SYSTEM FIRMWARE DOMAIN    |
|              |           |               |             |            | 103110268          | TW | Managing Firmware Updates                                                                                     |
| 83856486     | Published |               | 3/19/2014   |            | 103112831          | TW | Detection of a Security Event                                                                                 |
| 83873612     | Published |               | 4/8/2014    |            | 103116246          | TW | RESPONSE CONTROL FOR MEMORY MODULES THAT INCLUDE OR INTERFACE WITH NON-COMPLIANT MEMORY TECHNOLOGIES          |
| 83931680     | Published |               | 5/7/2014    |            | 103115833          | TW | WRITE FLOW CONTROL FOR MEMORY MODULES THAT INCLUDE OR INTERFACE WITH NON-COMPLIANT MEMORY TECHNOLOGIES        |
| 83932845     | Published |               | 5/2/2014    |            | 103115329          | TW | NON-VOLATILE MEMORY TO STORE RESETTABLE DATA                                                                  |
| 83939853     | Published |               | 4/29/2014   |            | 103117133          | TW | CONFIRM PROPER SEATING OF A DUAL INLINE MEMORY MODULE                                                         |
| 83944839     | Published |               | 5/15/2014   |            | 103117134          | TW | MODULES TO CONTAIN INTERFACE CARDS                                                                            |
| 83947509     | Published |               | 5/15/2014   |            | 103118257          | TW | FIRST DATA IN RESPONSE TO SECOND READ REQUEST                                                                 |
| 83952295     | Published |               | 5/26/2014   |            |                    |    |                                                                                                               |

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| 83972192     | Published   |               | 6/18/2014   |            | 103121026          | TW | CONFIGURING A COMMUNICATION INTERCONNECT FOR ELECTRONIC DEVICES     |
| 83972198     | Published   |               | 6/23/2014   |            | 103121586          | TW | Voltage Control for Crosspoint Memory Structures                    |
| 83973140     | Published   |               | 6/17/2014   |            | 103120804          | TW | GUIDE SEGMENT IDENTIFICATION                                        |
| 83974036     | Published   |               | 6/16/2014   |            | 103120677          | TW | DETERMINE MALFUNCTION STATE OF POWER SUPPLY MODULE                  |
| 83976057     | Application |               | 6/20/2014   |            | 103121333          | TW | FAN MODULE                                                          |
| 83982943     | Published   |               | 7/7/2014    |            | 103123321          | TW | BASEBOARD MANAGEMENT CONTROLLER PROVIDING PER SYSTEM IDENTIFICATION |
| 83982950     | Published   |               | 7/8/2014    |            | 103123468          | TW | DATA MANAGEMENT ON MEMORY MODULES                                   |
| 83982964     | Published   |               | 7/8/2014    |            | 103123461          | TW | MEMORY SPARING ON MEMORY MODULES                                    |
| 83984274     | Published   |               | 7/11/2014   |            | 103123968          | TW | STACKING NETWORK SWITCHES                                           |
| 83984295     | Published   |               | 7/9/2014    |            | 103123627          | TW | OPTICAL BLIND-MATE CONNECTOR AND ADAPTER                            |
| 84002907     | Published   |               | 7/22/2014   |            | 103125139          | TW | HEAT SINK                                                           |
| 84004472     | Application |               | 7/28/2014   |            | 103125655          | TW | RELEASE LATCH                                                       |
| 84017551     | Published   |               | 8/25/2014   |            | 103129188          | TW | SLOT BASED MANAGEMENT CONTROLLER ADDRESSBACKGROUND                  |
| 84022761     | Published   |               | 8/25/2014   |            | 103129190          | TW | NON-BINARY RANK MULTIPLICATION OF MEMORY MODULE                     |
| 84022775     | Published   |               | 8/26/2014   |            | 103129329          | TW | MEMORY ERASURE INFORMATION IN CACHE LINES                           |
| 84022806     | Application |               | 8/22/2014   |            | 103129033          | TW | TRANSMISSION OF COMMAND STRINGS AND STATUS STRINGS VIA MEMORY BUS   |
| 84049768     | Published   |               | 9/17/2014   |            | 103132042          | TW | FORWARDED LOG LINES                                                 |
| 84049885     | Published   |               | 9/18/2014   |            | 103132197          | TW | SERVER DOWNTIME METERING                                            |
| 84073475     | Published   |               | 1/21/2011   |            | 103136522          | TW | WAVEFRONT SYNTHESIZER SYSTEMS                                       |
| 84098630     | Application |               | 11/3/2014   |            | 103138136          | TW | TOP LOADING CARTRIDGE                                               |
| 84104649     | Application |               | 11/25/2014  |            | 103140700          | TW | SYSTEM WIDE MANAGEABILITY                                           |
| 84107704     | Application |               | 12/3/2014   |            | 103141940          | TW | FIRMWARE AUTHENTICATION                                             |
| 84116451     | Application |               | 12/9/2014   |            | 103142762          | TW | CONNECTOR WITH A RETAINER ASSEMBLY                                  |
| 84118423     | Application |               | 12/15/2014  |            | 103143693          | TW | MEMORY DATA VERSIONING                                              |
| 84118427     | Application |               | 12/18/2014  |            | 103144303          | TW | MANAGING DATA USING A NUMBER OF NON-VOLATILE MEMORY ARRAYS          |
| 84118435     | Application |               | 12/15/2014  |            | 103143695          | TW | REDUCING READ LATENCY OF MEMORY MODULES                             |
| 84118443     | Application |               | 12/18/2014  |            | 103144301          | TW | RENDERING DATA INVALID IN A MEMORY ARRAY                            |
| 84120874     | Application |               | 12/23/2014  |            | 103144962          | TW | SIGNAL INTERFACE COMPONENT FOR A PRINTED CIRCUIT BOARD              |
| 84120883     | Application |               | 12/24/2014  |            | 103145232          | TW | ACCESS CONTROLLED MEMORY REGION                                     |
| 84120917     | Application |               | 12/23/2014  |            | 103144963          | TW | RESISTIVE RATIO-BASED MEMORY CELL                                   |
| 84124374     | Application |               | 1/9/2015    |            | 104100738          | TW | MANAGING A DISTRIBUTION OF A PAYLOAD FOR A FLIGHT                   |
| 84126770     | Application |               | 1/5/2015    |            | 104100036          | TW | MANIFOLDS HAVING SLIDABLE DRIPLLESS CONNECTORS                      |

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| 84144544     | Application  |               | 1/21/2015   |            | 104101929          | TW | Voltage Regulation for Battery Strings                                                                                                     |
| 84145274     | Application  |               | 1/21/2015   |            | 104101930          | TW | BEHAVIOR MODIFICATION OF A POWER SUPPLY IN RESPONSE TO A DETECTED CONDITION                                                                |
| 84155478     | Application  |               | 2/12/2015   |            | 104104776          | TW | COMPONENT MULTICAST PROTOCOL                                                                                                               |
| 84190744     | Application  |               | 3/11/2015   |            | 104107716          | TW | CONNECTION CLASSIFICATION                                                                                                                  |
| 84193019     | Application  |               | 3/13/2015   |            | 104108065          | TW | LOAD SELECTION FOR RECEIVING POWER FROM A BATTERY MODULE                                                                                   |
| 84193048     | Application  |               | 3/18/2015   |            | 104108610          | TW | PACKET LOGGING                                                                                                                             |
| 84193056     | Application  |               | 3/13/2015   |            | 104108063          | TW | LIQUID COOLANT SUPPLY                                                                                                                      |
| 84193869     | Application  |               | 3/16/2015   |            | 104108278          | TW | DISC DRIVE MODULE                                                                                                                          |
| 84193881     | Application  |               | 3/13/2015   |            | 104108066          | TW | COMMUNICATION ASSOCIATED WITH MULTIPLE NODES FOR DELIVERY OF POWER                                                                         |
| 84221827     | Application  |               | 4/17/2015   |            | 104112421          | TW | SUPPORTING INPUT/OUTPUT (I/O) CONNECTIVITY FOR A PRINTED CIRCUIT ASSEMBLY (PCA) IN A HOT AISLE CABLING OR A COLD AISLE CABLING ARRANGEMENT |
| 84223965     | Application  |               | 4/24/2015   |            | 104113184          | TW | POWER SUPPLY CHASSIS INCLUDING A RELEASE LEVER                                                                                             |
| 84238526     | Application  |               | 5/8/2015    |            | 104114745          | TW | DUAL IN-LINE MEMORY MODULE CONNECTOR                                                                                                       |
| 84247494     | Application  |               | 5/15/2015   |            | 104115574          | TW | POINT-WISE PROTECTION OF APPLICATION USING RUNTIME AGENT AND DYNAMIC SECURITY ANALYSIS                                                     |
| 84251562     | Application  |               | 6/25/2015   |            | 104120562          | TW | System And Method For Designing A Printed Circuit Board                                                                                    |
| 84312524     | Application  |               | 9/3/2015    |            | 104129165          | TW | ISOLATION OF A FAULTY MEZZANINE CARD OF A SERVER                                                                                           |
| 84312981     | Application  |               | 7/22/2015   |            | 104123672          | TW | NEXT GENERATION FORM FACTOR CONNECTOR                                                                                                      |
| 84312987     | Application  |               | 7/22/2015   |            | 104123679          | TW | MULTI-BAY APPARATUS                                                                                                                        |
| 90032794     | Application  |               | 8/20/2015   |            | 104127116          | TW | THERMAL MANAGEMENT DOOR ASSEMBLY                                                                                                           |
| 90032802     | Application  |               | 8/20/2015   |            | 104127118          | TW | BACKUP POWER AND LOAD DISCOVERY                                                                                                            |
| 90032857     | Application  |               | 8/20/2015   |            | 104127117          | TW | FOLDABLE MEMORY CARTRIDGE                                                                                                                  |
| 90048554     | Application  |               | 9/21/2015   |            |                    | TW | Management Controller                                                                                                                      |
| 90048563     | Acknowledged |               |             |            |                    | TW | CPU WITH EXTERNAL FAULT RESPONSE HANDLING                                                                                                  |
| 90053549     | Acknowledged |               |             |            |                    | TW | SUPERVISORY MEMORY MANAGEMENT UNIT                                                                                                         |
| 90053775     | Acknowledged |               |             |            |                    | TW | HEAT SINK WITH A LOAD SPREADING BAR                                                                                                        |
| 90054399     | Acknowledged |               |             |            |                    | TW | IMMERSION COOLED TOP-LOADING COMPUTING CARTRIDGES                                                                                          |
| 90054408     | Acknowledged |               |             |            |                    | TW | DUAL IN-LINE MEMORY MODULE (DIMM) FORM FACTOR BACKUP POWER SUPPLY                                                                          |
| 90054414     | Application  |               | 9/18/2015   |            |                    | TW | MODULAR COOLING                                                                                                                            |
| 90055167     | Instructed   |               |             |            |                    | TW | BACKUP POWER SUPPLY CELL IN MEMORY DEVICE                                                                                                  |
| 90057809     | Acknowledged |               |             |            |                    | TW | RECEPTACLE FOR CONNECTING A MULTI-LANE OR ONE-LANE CABLE                                                                                   |
| 90064267     | Acknowledged |               |             |            |                    | TW | SERVER NODE SHUTDOWN                                                                                                                       |
| 90064352     | Acknowledged |               |             |            |                    | TW | ADMISSIONS CONTROL OF A DEVICE                                                                                                             |

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|--------------|--------------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82248557     | Published    |               | 3/29/2010   |            | 99109386           | TW | Energy-efficient Standby Mode In A Switching Power Supply                                                                                                                 |
| 84049844     | Application  |               | 9/17/2014   |            | 103132046          | TW | SELECTIVELY-ENABLED BACK-UP POWER                                                                                                                                         |
| 84107694     | Application  |               | 12/2/2014   |            | 103141764          | TW | POWERING LOADS WITH A POWER SUPPLY AND AN UNINTERRUPTIBLE POWER SUPPLY                                                                                                    |
| 84265049     | Application  |               | 6/26/2015   |            | 104120794          | TW | REMOVABLE TEST AND DIAGNOSTICS CIRCUIT                                                                                                                                    |
| 84254661     | Application  |               | 5/22/2015   |            | 104116411          | TW | MULTIPLE TANK COOLING SYSTEM                                                                                                                                              |
| 82031486     | Granted      | 1235916       | 9/27/2000   | 38544      | 89119981           | TW | Multiple Issue Algorithm With Oversubscription Avoidance Features To Get High Bandwidth Through Cache Pipeline                                                            |
| 82250930     | Published    |               | 9/6/2010    |            | 99130026           | TW | Memory Subsystem Having A First Portion To Store Data With Error Correction Code Information And A Second Portion To Store Data Without Error Correction Code Information |
| 83417388     | Published    |               | 41466       |            | 102124889          | TW | REFRESHING A GROUP OF MEMORY CELLS IN RESPONSE TO PRESENCE OF POTENTIAL DISTURBANCE                                                                                       |
| 83810228     | Published    |               | 41690       |            | 103105658          | TW | MEMORY DEVICE HAVING ERROR CORRECTION LOGIC                                                                                                                               |
| 83931539     | Published    |               | 41760       |            | 103115708          | TW | STORAGE DEVICE WRITE PULSE CONTROL                                                                                                                                        |
| 83962339     | Published    |               | 41814       |            | 103121738          | TW | MEMORY COMPONENT CAPABLE TO COMMUNICATE AT MULTIPLE DATA WIDTHS                                                                                                           |
| 83972203     | Published    |               | 41808       |            | 103121027          | TW | OFF-MEMORY-MODULE ECC-SUPPLEMENTAL MEMORY SYSTEM                                                                                                                          |
| 84120913     | Application  |               | 12/24/2014  |            | 103145251          | TW | MEMORY CELL HAVING RESISTIVE AND CAPACITIVE STORAGE ELEMENTS                                                                                                              |
| 84120933     | Application  |               | 41997       |            | 103145227          | TW | REMAPPING MEMORY LOCATIONS IN A MEMORY ARRAY                                                                                                                              |
| 82259921     | Published    |               | 40317       |            | 99115934           | TW | Pivoting Mounts For Media Drives                                                                                                                                          |
| 83691170     | Published    |               | 41544       |            | 102135114          | TW | PLENUMS FOR REMOVABLE MODULES                                                                                                                                             |
| 83874204     | Published    |               | 41725       |            | 103111453          | TW | CONVERTERS TO PROVIDE LIGHT LOAD OUTPUT                                                                                                                                   |
| 83976007     | Published    |               | 6/20/2014   |            | 103121329          | TW | UNINTERRUPTIBLE POWER SUPPLY WITH INVERTER, CHARGER, AND ACTIVE FILTER                                                                                                    |
| 84157501     | Application  |               | 2/5/2015    |            | 104104008          | TW | DISK DRIVE MODULE                                                                                                                                                         |
| 84223984     | Application  |               | 4/24/2015   |            | 104113182          | TW | THERMAL MANAGEMENT ASSEMBLY                                                                                                                                               |
| 90057805     | Acknowledged |               |             |            |                    | TW | Receptacle for conenction a multi-lane or one-lane cable                                                                                                                  |
| 82024991     | Granted      | 465052        | 5/10/2000   | 37216      | 89108942           | TW | IC Die Power Connection Using Canted Coil Spring                                                                                                                          |
| 82184195     | Granted      | 1333400       | 8/17/2004   | 40493      | 93124653           | TW | Printed Circuit Board Substrate And Method For Constructing Same                                                                                                          |
| 84118414     | Application  |               | 12/17/2014  |            | 103144047          | TW | RACK CONTROL MODULE                                                                                                                                                       |
| 83123520     | Published    |               | 10/24/2012  |            | 101139270          | TW | CONNECTOR                                                                                                                                                                 |
| 83874178     | Published    |               | 3/27/2014   |            | 103111455          | TW | DATA FLUSH OF GROUP TABLE                                                                                                                                                 |
| 84120867     | Application  |               | 12/23/2014  |            | 103144958          | TW | MANAGING A MULTI-LANE SERIAL LINK                                                                                                                                         |
| 90040261     | Application  |               | 9/3/2015    |            | 104129161          | TW | DETERMINE PROTECTIVE MEASURE FOR DATA THAT MEETS CRITERIA                                                                                                                 |

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| 84259550     | Application |               | 42157       |            | 104117755          | TW | ACTION EXECUTION BASED ON MANAGEMENT CONTROLLER                                                                      |
| 90064274     | Instructed  |               |             |            |                    | TW | ACTION REQUEST                                                                                                       |
| 82195367     | Granted     | 1396971       | 3/27/2006   | 5/21/2013  | 95110529           | TW | RESOURCE FEDERATION                                                                                                  |
| 81967121     | Granted     | 1280830       | 12/13/2002  | 39203      | 91136159           | TW | Memory Mapped Page Priorities                                                                                        |
| 82031114     | Granted     | 479192        | 9/4/2000    | 37326      | 89118037           | TW | Reconfigurable Multilayer Printed Circuit Board                                                                      |
| 84192420     | Application |               | 3/13/2015   |            | 104108087          | TW | Carry Look-ahead For Bi-endian Adder                                                                                 |
| 82258301     | Published   |               | 6/29/2010   |            | 99121215           | TW | SEMANTIC RESTRICTION                                                                                                 |
| 82635910     | Granted     | 1467232       | 1/31/2011   | 42005      | 100103683          | TW | INDIVIDUALLY ADDRESSABLE NANO-SCALE MECHANICAL ACTUATORS                                                             |
|              |             |               |             |            |                    |    | NON-PERIODIC GRATINGS FOR SHAPING REFLECTED AND TRANSMITTED LIGHT IRRADIANCE PROFILES AND SYSTEM COMPRISING THE SAME |
| 82674261     | Granted     | 1459211       | 3/18/2011   | 41944      | 100109320          | TW | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                                               |
| 82861308     | Granted     | 1467258       | 40823       | 42005      | 100136479          | TW | ELECTRONIC SYSTEM AND METHOD FOR IMPLEMENTING THE SAME                                                               |
| 83167015     | Published   |               | 1/28/2013   |            | 102103081          | TW | HYBRID ELECTRO-OPTICAL PACKAGE FOR AN OPTO-ELECTRONIC ENGINE                                                         |
| 83410146     | Allowed     |               | 6/19/2013   |            | 102121776          | TW | Optical Shuffling                                                                                                    |
| 84142662     | Application |               | 1/16/2015   |            | 104101496          | TW | CONFIGURABLE WORKLOAD OPTIMIZATION                                                                                   |
| 84184863     | Application |               | 3/6/2015    |            | 104107245          | TW | NETWORK SECURITY FOR ENCRYPTED CHANNELBASED ON REPUTATION                                                            |
| 83782133     | Published   |               | 1/14/2014   |            | 103101260          | TW | Dynamic Firmware Updating                                                                                            |
| 83853162     | Published   |               | 3/17/2014   |            | 103109939          | TW | MAKING MEMORY OF COMPUTE AND EXPANSION BLADE DEVICES AVAILABLE FOR USE BY AN OPERATING SYSTEM                        |
| 84145278     | Application |               | 1/29/2015   |            | 104102978          | TW | DEVICE PROVIDED SCRIPT TO CONVERT COMMAND                                                                            |
| 84223970     | Application |               | 4/28/2015   |            | 104113509          | TW | FLOOD DISABLE ON NETWORK SWITCH                                                                                      |
| 82739313     | Allowed     |               | 5/18/2011   |            | 100117354          | TW | Accessing A Local Storage Device Using An Auxiliary Processor                                                        |
| 83235004     | Published   |               | 5/2/2013    |            | 102115688          | TW | HIGH PERFORMANCE PERSISTENT MEMORY                                                                                   |
| 82250300     | Allowed     |               | 12/22/2009  |            | 98144189           | TW | Computer Including Hot-pluggable Disk Storage Drives That Are Mounted In An In-line Arrangement                      |
| 83835240     | Published   |               | 3/10/2014   |            | 103108107          | TW | Disabling Counterfeit Cartridges                                                                                     |
| 84287948     | Application |               | 6/22/2015   |            | 104119954          | TW | BOLSTER PLATE                                                                                                        |
| 81972857     | Granted     | 1236218       | 4/16/2001   | 38544      | 90109023           | TW | Method And Apparatus For De-Skewing Clock Edges For Systems With Distributed Clocks                                  |
| 82240622     | Granted     | 1446755       | 5/7/2009    | 7/21/2014  | 98115119           | TW | A Method For Interfacing A Fibre Channel Network With An Ethernet Based Network                                      |
| 82240937     | Granted     | 1435538       | 8/25/2008   | 4/21/2014  | 97132359           | TW | Ratio Granularity Clock Divider Circuit And Method                                                                   |
| 83732827     | Published   |               | 11/21/2013  |            | 102142411          | TW | FAULT TOLERANCE IN A MULTI-CORE CIRCUIT                                                                              |

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| 83982928     | Published   |               | 7/7/2014    |            | 103123324          | TW | SNAPSHOT MESSAGE                                                                                                                                                                                    |
| 83117975     | Published   |               | 10/22/2012  |            | 101138893          | TW | DRIVE CARRIER TOUCH SENSING                                                                                                                                                                         |
| 83720616     | Granted     | 1498620       | 11/5/2013   | 42248      | 102140128          | TW | OPTICAL CONNECTOR HAVING A CLEANING ELEMENT                                                                                                                                                         |
| 82274963     | Granted     | 1395435       | 2/16/2009   | 41395      | 98104871           | TW | Open Network Connections                                                                                                                                                                            |
| 83154772     | Granted     | 1496000       | 12/21/2012  | 42227      | 101149072          | TW | PROPER INSTALLATION DETERMINATION BASED ON RFI                                                                                                                                                      |
| 84087625     | Application |               | 10/29/2014  |            | 103137392          | TW | METHOD AND SYSTEM FOR FACILITATING MULTI-CURRENCY                                                                                                                                                   |
| 83945516     | Published   |               | 5/9/2014    |            | 103116503          | TW | CARD PAYMENT TRANSACTIONS                                                                                                                                                                           |
| 90040275     | Application |               | 9/18/2015   |            | 104130973          | TW | MOBILE AUGMENTED REALITY FOR MANAGING ENCLOSURE AREAS                                                                                                                                               |
| 82188989     | Granted     | 1396136       | 1/3/2006    | 41405      | 95100160           | TW | DETERMINE SECURE ACTIVITY OF APPLICATION UNDER TEST                                                                                                                                                 |
|              |             |               |             |            |                    |    | A Method And Apparatus For Using Code Written In A Language That Is Not Native To The Computer System To Invoke A Procedure Written In A Programming Language That Is Native To The Computer System |
| 83720636     | Published   |               | 11/5/2013   |            | 102140129          | TW | Mapping Mechanism for Large Shared Address Spaces                                                                                                                                                   |
| 83810245     | Published   |               | 2/17/2014   |            | 103105119          | TW | Non-Volatile Memory Based Synchronous Logic                                                                                                                                                         |
| 83810428     | Allowed     |               | 2/19/2014   |            | 103105495          | TW | Shared Memory System                                                                                                                                                                                |
| 84118368     | Application |               | 12/16/2014  |            | 103143831          | TW | RE-INITIALIZING MEMORY ARRAYS                                                                                                                                                                       |
| 84118431     | Application |               | 12/16/2014  |            | 103143834          | TW | IDENTIFYING MEMORY REGIONS THAT CONTAIN REMAPPED MEMORY LOCATIONS                                                                                                                                   |
| 84120887     | Application |               | 12/24/2014  |            | 103145230          | TW | DRAM ROW SPARING                                                                                                                                                                                    |
| 90048559     | Application |               | 9/11/2015   |            | 104130099          | TW | COMMITTING ALTERED METADATA TO A NON-VOLATILE STORAGE DEVICE                                                                                                                                        |
| 90068725     | Instructed  |               |             |            |                    | TW | RESISTIVE MEMORY DEVICE                                                                                                                                                                             |
| 84189474     | Application |               | 3/13/2015   |            | 104108086          | TW | RESOURCE RESTRICTION                                                                                                                                                                                |
| 8258352      | Published   |               | 5/26/2010   |            | 99116812           | TW | MEMCAPACTOR                                                                                                                                                                                         |
| 8259225      | Published   |               | 7/26/2010   |            | 99124521           | TW | Reconfigurable Multilayer Circuit                                                                                                                                                                   |
| 82680229     | Granted     | 1484627       | 3/28/2011   | 5/11/2015  | 100110578          | TW | CONNECTION AND ADDRESSING OF MULTI-PLANE CROSSPOINT DEVICES                                                                                                                                         |
| 82962959     | Granted     | 1484234       | 3/14/2012   | 5/11/2015  | 101108614          | TW | SUB-WAVELENGTH GRATING-BASED OPTICAL ELEMENTS, WAVEGUIDE COUPLER AND OPTOELECTRONIC DEVICE                                                                                                          |
| 83109760     | Granted     | 1497134       | 9/20/2012   | 42237      | 101134485          | TW | GRATING COUPLERS WITH DEEP-GROOVE NON-UNIFORM GRATINGS                                                                                                                                              |
| 83167072     | Published   |               | 1/28/2013   |            | 102103087          | TW | OPTICAL ARCHITECTURES, OPTICAL DISTRIBUTION MATRICES, AND METHODS OF MANUFACTURING OPTICAL STRUCTURES                                                                                               |
| 82579396     | Granted     | 1417737       | 10/25/2007  | 41609      | 96140086           | TW | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security                                                                                    |

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| 83982178     | Granted      | 413988        | 2/3/1999    | 12/1/2000  | 88101616           | TW | CRYPTOGRAPHIC SYSTEM                                                               |
| 82738978     | Granted      | 1457830       | 5/13/2011   | 41933      | 100116828          | TW | Virtual Machine Code Injection                                                     |
| 83277079     | Published    |               | 6/7/2013    |            | 102120305          | TW | AUGMENTING MEMORY CAPACITY FOR KEY VALUE CACHES                                    |
| 83421358     | Published    |               | 6/28/2013   |            | 102123260          | TW | Multi-Level Cell Memory                                                            |
| 83769017     | Published    |               | 12/18/2013  |            | 102146927          | TW | ADAPTIVE GRANULARITY ROW BUFFER CACHE                                              |
| 84291366     | Application  |               | 7/2/2015    |            | 104121526          | TW | NODE-BASED COMPUTE DEVICE WITH PROTOCOL-BASED PRIORITY                             |
| 82248989     | Allowed      |               | 3/30/2010   |            | 99109580           | TW | Method And System For Load Sharing In A Multiple Power Supply System               |
| 84193052     | Application  |               | 3/13/2015   |            | 104108064          | TW | PROVIDING BACKUP POWER                                                             |
| 81992147     | Granted      | 559692        | 5/23/2002   | 37926      | 91110933           | TW | Method And System For Controlling A Cooling Fan Within A Computer System           |
| 82204040     | Granted      | 1409026       | 4/19/2006   | 41528      | 95113917           | TW | Cooling Fan With External Circuit Board                                            |
| 83857092     | Published    |               | 3/18/2014   |            | 103110076          | TW | ZONEABLE POWER REGULATION                                                          |
| 90054404     | Application  |               | 9/17/2015   |            | 104130786          | TW | MODULAR UTILITIES                                                                  |
| 90055237     | Application  |               | 9/23/2015   |            |                    | TW | SERVER DEVICE WITH CAPACITIVE CIRCUIT                                              |
| 83692386     | Allowed      |               | 10/1/2013   |            | 102135557          | TW | ELECTRICAL CONNECTORS FOR POWER SUPPLIES                                           |
| 83832483     | Published    |               | 3/13/2014   |            | 103109095          | TW | TOP LOADING CARTRIDGE                                                              |
| 83975826     | Published    |               | 6/20/2014   |            | 103121330          | TW | INTERRUPTION OF OUTPUT POWER AND AUXILIARY POWER                                   |
| 84004542     | Published    |               | 7/28/2014   |            | 103125656          | TW | RAIL FOR MOUNTING A RACK-MOUNTABLE COMPONENT                                       |
| 84261493     | Application  |               | 6/9/2015    |            | 104118582          | TW | SUPPORT MEMBER                                                                     |
| 84310710     | Application  |               | 7/14/2015   |            | 104122723          | TW | RETENTION ASSEMBLY                                                                 |
| 90032798     | Application  |               | 8/20/2015   |            | 104127115          | TW | FAN MODULE ASSEMBLY                                                                |
| 90054418     | Acknowledged |               |             |            |                    | TW | Hard Drive Carrier                                                                 |
| 82220759     | Granted      | 1441473       | 9/27/2007   | 41801      | 96135936           | TW | Systems And Methods For Synchronizing An Input Signal                              |
| 83123505     | Published    |               | 10/24/2012  |            | 101139272          | TW | ENVIRONMENTAL DATA RECORD                                                          |
| 83874183     | Published    |               | 3/27/2014   |            | 103111472          | TW | ADDRESS RANGE TRANSFER FROM FIRST NODE TO SECOND NODE                              |
| 83984336     | Allowed      |               | 7/9/2014    |            | 103123625          | TW | ATTACHING CONNECTORS                                                               |
| 84120878     | Application  |               | 12/24/2014  |            | 103145229          | TW | SENDING A DATA FLOW                                                                |
| 83221567     | Granted      | 1496486       | 3/29/2013   | 42227      | 102111413          | TW | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE FOR A VIOLATION OF THE PERIMETER |
| 90040266     | Application  |               | 9/18/2015   |            | 104130972          | TW | INFRASTRUCTURE RULE GENERATION                                                     |
| 82128176     | Granted      | 98533         | 6/5/1997    | 36089      | 86107763           | TW | CONNECTING EXPANSION CARDS                                                         |
| 83417396     | Published    |               | 7/11/2013   |            | 102125077          | TW | REPAIRING A MEMORY DEVICE                                                          |
| 83958843     | Published    |               | 5/28/2014   |            | 103118611          | TW | WRITABLE DEVICE BASED ON ALTERNATING CURRENT                                       |
| 83972185     | Published    |               | 6/25/2014   |            | 103121923          | TW | Recovering Stranded Data                                                           |
| 83974206     | Published    |               | 6/25/2014   |            | 103121925          | TW | Refresh Rate Adjust                                                                |
| 84118419     | Application  |               | 12/16/2014  |            | 103143827          | TW | IMIGRATING DATA BETWEEN MEMORIES                                                   |

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| 84118439     | Application  |               | 12/18/2014  |            | 103144305          | TW | ACCESSING A RESISTIVE STORAGE ELEMENT-BASED MEMORY CELL ARRAY                                                            |
| 84120938     | Application  |               | 12/24/2014  |            | 103145228          | TW | ENCODING DATA IN A MEMORY ARRAY                                                                                          |
| 84175502     | Application  |               | 42081       |            | 104108607          | TW | VALIDATION OF A REPAIR TO A SELECTED ROW OF DATA                                                                         |
| 8421831      | Application  |               | 4/21/2015   |            | 104112685          | TW | MEMORY CONTROLLER                                                                                                        |
| 82579562     | Granted      | 1406152       | 9/7/2009    | 41507      | 98130163           | TW | Storing Log Data Efficiently While Supporting Querying                                                                   |
| 83782138     | Published    |               | 1/14/2014   |            | 103101259          | TW | Managing Volatile File Copies                                                                                            |
| 83782144     | Published    |               | 1/17/2014   |            | 103101790          | TW | UPDATING NON-APPENDABLE RECORD                                                                                           |
| 83832523     | Published    |               | 3/10/2014   |            | 103108129          | TW | DETERMINE VOLTAGE SUPPLIED TO A CORE                                                                                     |
| 83854481     | Allowed      |               | 3/20/2014   |            | 103110497          | TW | UPDATE OF PROGRAMMABLE FOR COMPUTING NODES                                                                               |
| 90054395     | Acknowledged |               |             |            |                    | TW | OPERATING SYSTEM AGNOSTIC VALIDATION OF FIRMWARE IMAGES                                                                  |
| 82201532     | Granted      | 1413122       | 3/22/2006   | 10/21/2013 | 95109849           | TW | Multiplexer Interface To A Nanoscale-crossbar                                                                            |
| 82214708     | Granted      | 1364093       | 10/15/2007  | 41040      | 96138453           | TW | CROSSBAR-MEMORY SYSTEMS AND METHODS FOR WRITING TO AND READING FROM CROSSBAR MEMORY JUNCTIONS OF CROSSBAR-MEMORY SYSTEMS |
|              |              |               |             |            |                    |    | MEMRISTIVE JUNCTION WITH INTRINSIC RECTIFIER                                                                             |
| 82258220     | Published    |               | 7/9/2010    |            | 99122678           | TW | CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC                                                                          |
| 82580996     | Granted      | 1447452       | 12/16/2010  | 41852      | 99144194           | TW | VERTICAL-CAVITY SURFACE-EMITTING LASERS WITH NON-PERIODIC GRATINGS                                                       |
| 82635892     | Granted      | 1489714       | 1/31/2011   | 42176      | 100103681          | TW | TELECENTRIC OPTICAL ASSEMBLY                                                                                             |
| 82654418     | Granted      | 1440907       | 3/1/2011    | 41801      | 100106646          | TW | Optical Interconnect Fabrics And Optical Switches                                                                        |
| 82654435     | Granted      | 1451143       | 5/18/2011   | 41883      | 100117350          | TW | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                                                   |
| 82713353     | Granted      | 1452473       | 7/29/2011   | 41893      | 100127015          | TW | VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                                                  |
| 83051692     | Granted      | 1475773       | 7/27/2012   | 42064      | 101127183          | TW | OPTICAL CONNECTORS                                                                                                       |
| 83140047     | Published    |               | 12/19/2012  |            | 101148280          | TW | Method For Writing Data Bits To A Memory Array                                                                           |
| 81997322     | Granted      | 1266333       | 11/26/2002  | 11/11/2006 | 91134353           | TW | Providing Virtual Device Access Via Firmware                                                                             |
| 82190666     | Granted      | 1421766       | 3/30/2006   | 41640      | 95111182           | TW | Drive Carrier With Pivoting Handle                                                                                       |
| 82259900     | Published    |               | 5/19/2010   |            | 99115931           | TW | HEAT REMOVAL ASSEMBLY                                                                                                    |
| 83692397     | Published    |               | 10/1/2013   |            | 102135690          | TW | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM                           |
| 83778720     | Published    |               | 12/25/2013  |            | 102148146          | TW | CONNECTOR DEVICE TO REMOVABLY CONNECT AND LOCK TO A FRAME                                                                |
| 84065446     | Application  |               | 41911       |            | 103133857          | TW | HANDLE MECHANISM                                                                                                         |
| 84157637     | Application  |               | 2/12/2015   |            | 104104695          | TW | SYSTEM TO QUALIFY DATA CAPTURE AND ON-CHIP LOGIC ANALYZER                                                                |
| 82181609     | Granted      | 1308690       | 12/12/2005  | 4/11/2009  | 94143867           | TW | Misalignment-Tolerant Multiplexing/Demultiplexing Architectures                                                          |
| 82188350     | Granted      | 1393257       | 4/1/2005    | 41375      | 94110481           | TW |                                                                                                                          |

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| 83123516     | Allowed     |               | 10/24/2012  |            | 101139276          | TW | DRIVE CARRIER AND DRIVE SYSTEM                                                                                     |
| 82105259     | Granted     | 1242715       | 11/25/2003  | 11/1/2005  | 92133051           | TW | System And Method For Effectuating The Transfer Of Data<br>Blocks Including A Header Block Across A Clock Boundary |
| 83984330     | Published   |               | 7/11/2014   |            | 103123966          | TW | INTERPRETING SIGNALS RECEIVED FROM REDUNDANT DEVICES                                                               |
| 84118410     | Application |               | 12/16/2014  |            | 103143829          | TW | ELECTRO-OPTICAL SIGNAL TRANSMISSION                                                                                |
| 82034648     | Granted     | 448368        | 9/29/1999   | 8/1/2001   | 88116730           | TW | Adaptive PCI Slot                                                                                                  |
| 83811355     | Published   |               | 2/14/2014   |            | 103104928          | TW | Split Mode Addressing of Persistent Memory                                                                         |
| 83813144     | Published   |               | 2/24/2014   |            | 103106078          | TW | Coalescing Memory Access Requests                                                                                  |
| 83980583     | Published   |               | 7/2/2014    |            | 103122824          | TW | COMPLETION PACKET RETURN                                                                                           |
| 84120929     | Application |               | 12/24/2014  |            | 103145226          | TW | UNIFYING MEMORY CONTROLLER                                                                                         |
| 82258214     | Published   |               | 7/27/2010   |            | 99124718           | TW | ELECTROFORMING-FREE NANOSCALE SWITCHING DEVICE                                                                     |
| 82861410     | Published   |               | 10/20/2011  |            | 100138068          | TW | METAL-INSULATOR TRANSITION SWITCHING DEVICES                                                                       |
| 83051185     | Published   |               | 7/26/2012   |            | 101126933          | TW | NITRIDE-BASED MEMRISTORS                                                                                           |
| 82760563     | Allowed     |               | 6/21/2011   |            | 100121614          | TW | Tent Isolation In A Multi-tent Cloud System                                                                        |
| 83798743     | Published   |               | 2/5/2014    |            | 103103770          | TW | CONTROLLER COUPLED TO VISUAL INDICATOR                                                                             |
| 83854475     | Published   |               | 3/18/2014   |            | 103110135          | TW | Extensible Firmware Abstraction                                                                                    |
| 84115871     | Application |               | 12/8/2014   |            | 103142572          | TW | PACKET INSPECTION TO DETERMINE DESTINATION NODE                                                                    |
| 83769002     | Published   |               | 12/19/2013  |            | 102147165          | TW | SELECTING CIRCUITS OF A MULTI-LEVEL INTEGRATED CIRCUIT                                                             |
| 84234391     | Application |               | 5/6/2015    |            | 104114451          | TW | SUBSTRATE SPRAYER                                                                                                  |
| 83779198     | Published   |               | 1/6/2014    |            | 103100341          | TW | THREE-PHASE PARALLEL POWER CONVERTER LOAD<br>ADJUSTMENT                                                            |
| 84158928     | Application |               | 2/13/2015   |            | 104104975          | TW | CONTROLLING IMPEDANCE OF BLANK CARTRIDGES                                                                          |
| 84312865     | Application |               | 7/22/2015   |            | 104123673          | TW | AIR AND FLUID COOLING OF A DATA CENTER                                                                             |
| 81944219     | Granted     | 5944819       | 2/18/1993   | 36403      | 08/018972          | US | Method And System To Optimize Software Execution By A<br>Computer Using Hardware Attributes Of The Computer        |
| 81948977     | Granted     | 6151635       | 6/29/1993   | 36851      | 08/084668          | US | Router Connections Through Switching Networks Using<br>Virtual Circuits                                            |
| 81949595     | Granted     | 5716018       | 12/17/1996  | 35836      | 08/768262          | US | Tape Guide For Digital Data Tape Mini-Cartridge                                                                    |
| 81952979     | Granted     | 5778155       | 10/10/1995  | 35983      | 08/541843          | US | METHOD AND APPARATUS FOR SELECTING AMONG<br>COMPETING FACTS TO ACHIEVE THE DESIRED CALCULATION                     |
| 81954512     | Granted     | 5673384       | 10/6/1995   | 35703      | 08/540381          | US | Dual Disk Lock Arbitration Between Equal Sized Partition Of A<br>Cluster                                           |
| 81956963     | Granted     | 5757377       | 5/20/1996   | 35941      | 08/650197          | US | Expediting Blending And Interpolation Via Multiplication                                                           |
| 81957092     | Granted     | 5878431       | 10/4/1996   | 36221      | 08/725442          | US | Method And Apparatus For Providing Topology Based<br>Enterprise Management Services                                |
| 81957761     | Granted     | 5600137       | 10/20/1995  | 35465      | 08/546046          | US | Probe Apparatus Having Reduced Misalignment Of<br>Conductive Needles                                               |

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| 81957770     | Granted | 6219825       | 1/10/1995   | 36998      | 08/370963          | US | PROFILE BASED OPTIMIZATION OF SHARED LIBRARIES                                                                                                               |
| 81958388     | Granted | 5844553       | 3/29/1996   | 36130      | 08/625615          | US | MECHANISM TO CONTROL AND USE WINDOW EVENTS                                                                                                                   |
| 81961460     | Granted | 5978933       | 1/11/1996   | 36466      | 08/584830          | US | AMONG APPLICATIONS IN CONCURRENT COMPUTING                                                                                                                   |
| 81961466     | Granted | 5737311       | 1/11/1996   | 35892      | 08/587864          | US | Generic Fault Tolerant Platform                                                                                                                              |
| 81965687     | Granted | 7013376       | 12/20/2000  | 38790      | 09/746328          | US | Failure Detection Method In A Communication Channel with Several Routes                                                                                      |
| 81965828     | Granted | 6684244       | 1/7/2000    | 38013      | 09/479205          | US | Method And System For Data Block Sparing In A Solid-state Storage Device                                                                                     |
| 81965831     | Granted | 7032243       | 7/2/2001    | 38825      | 09/897262          | US | Aggregated Policy Deployment And Status Propagation In Network Management Systems                                                                            |
| 81966323     | Granted | 6789186       | 2/18/2000   | 38237      | 09/507038          | US | System And Method For A Group-Based Network Access Control For Computer                                                                                      |
| 81966338     | Granted | 6622241       | 2/18/2000   | 9/16/2003  | 09/507499          | US | Method And Apparatus To Reduce Penalty Of Microcode Lookup                                                                                                   |
| 81966449     | Granted | 6880153       | 11/21/2000  | 4/12/2005  | 09/718059          | US | METHOD AND APPARATUS FOR REDUCING BRANCH PREDICTION TABLE POLLUTION                                                                                          |
|              |         |               |             |            |                    |    | METHOD AND APPARATUS FOR VARYING THE LEVEL OF CORRECTNESS CHECKS EXECUTED WHEN PERFORMING CORRECTNESS CHECKS OPPORTUNISTICALLY USING SPARE INSTRUCTION SLOTS |
| 81966632     | Granted | 6620710       | 9/18/2000   | 9/16/2003  | 09/664916          | US | FORMING A SINGLE CRYSTAL SEMICONDUCTOR FILM ON A NON-CRYSTALLINE SURFACE                                                                                     |
| 81966650     | Granted | 6885031       | 8/9/2003    | 4/26/2005  | 10/638858          | US | INTEGRATED CIRCUIT INCLUDING SINGLE CRYSTAL SEMICONDUCTOR LAYER ON NON-CRYSTALLINE LAYER                                                                     |
| 81966689     | Granted | 6490544       | 2/4/2000    | 12/3/2002  | 09/498203          | US | SYSTEM FOR TESTING A MULTI-TASKING COMPUTING DEVICE                                                                                                          |
| 81966692     | Granted | 6961758       | 6/29/2001   | 11/1/2005  | 09/896582          | US | PERSONALIZED INTERNET CONTENT SERVER SYSTEM                                                                                                                  |
| 81966890     | Granted | 6665671       | 4/4/2001    | 12/16/2003 | 09/826273          | US | System And Method For Optimization Of Shared Data                                                                                                            |
| 81966899     | Granted | 7284264       | 12/8/2000   | 10/16/2007 | 09/732621          | US | Discovery Of An Advertising Service In E-speak                                                                                                               |
| 81966959     | Granted | 6807602       | 10/30/2000  | 10/19/2004 | 09/699877          | US | DATA STORAGE SYSTEM AND METHOD UTILIZING CHECKSUMS AND PROTECTION KEYS                                                                                       |
| 81967139     | Granted | 6735774       | 10/23/2000  | 5/11/2004  | 09/694746          | US | Method And Apparatus For System Call Management                                                                                                              |
| 81967148     | Granted | 6920485       | 10/4/2001   | 7/19/2005  | 09/971989          | US | Packet Processing In Shared Memory Multi-Computer Systems                                                                                                    |
| 81967262     | Granted | 6721848       | 12/8/2000   | 4/13/2004  | 09/733123          | US | Method And Mechanism To Use A Cache To Translate From A Virtual Bus To A Physical Bus                                                                        |
| 81967265     | Granted | 7032074       | 4/1/2004    | 4/18/2006  | 10/814154          | US | Method And Mechanism To Use A Cache To Translate From A Virtual Bus To A Physical Bus                                                                        |
| 81967448     | Granted | 6356470       | 4/29/2000   | 3/12/2002  | 09/563003          | US | Dual input, hot swappable dual redundant,enhanced N+1 AC to DC power system                                                                                  |

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| 81967451     | Granted | 6430068       | 8/28/2001   | 8/6/2002   | 09/940973          | US | Dual Input, Hot Swappable Dual Redundant, Enhanced Input                                                                                               |
| 81967454     | Granted | 6654265       | 6/14/2002   | 11/25/2003 | 10/171915          | US | AC To DC Power System                                                                                                                                  |
| 81967499     | Granted | 6950961       | 2/13/2001   | 9/27/2005  | 09/783159          | US | Dual Input, Hot Swappable Dual Redundant, Enhanced Input                                                                                               |
| 81967625     | Granted | 6687872       | 3/14/2001   | 2/3/2004   | 09/808910          | US | AC To DC Power System                                                                                                                                  |
| 81967634     | Granted | 7111227       | 12/4/2003   | 9/19/2006  | 10/728274          | US | Highly Available, Monotonic Increasing Sequence Number Generation                                                                                      |
| 81967835     | Granted | 7269726       | 1/14/2000   | 9/11/2007  | 09/483186          | US | Methods And Systems Of Using Result Buffers In Parity Operations                                                                                       |
| 81967871     | Granted | 6226217       | 2/18/2000   | 5/1/2001   | 09/507207          | US | Methods And Systems Of Using Result Buffers In Parity Operations                                                                                       |
| 81967877     | Granted | 6192001       | 2/21/2000   | 2/20/2001  | 09/510287          | US | Methods And Systems Of Using Result Buffers In Parity Operations                                                                                       |
| 81968138     | Granted | 6678817       | 2/22/2000   | 1/13/2004  | 09/510010          | US | Lightweight Public Key Infrastructure Employing Unsigned Certificates                                                                                  |
|              |         |               |             |            |                    |    | Register Structure With A Dual-Ended Write Mechanism                                                                                                   |
| 81968312     | Granted | 6553512       | 2/16/2000   | 4/22/2003  | 09/505978          | US | Integrated weak write test mode (WWWTM)                                                                                                                |
| 81968330     | Granted | 6452789       | 4/29/2000   | 9/17/2002  | 09/562593          | US | METHOD AND APPARATUS FOR FETCHING INSTRUCTIONS FROM THE MEMORY SUBSYSTEM OF A MIXED ARCHITECTURE PROCESSOR INTO A HARDWARE EMULATION ENGINE            |
| 81968648     | Granted | 6684343       | 4/29/2000   | 1/27/2004  | 09/561812          | US | Method And Apparatus For Resolving CPU Deadlocks                                                                                                       |
| 81968870     | Granted | 6874116       | 5/22/2003   | 3/29/2005  | 10/443103          | US | Packaging Architecture For 32 Processor Server                                                                                                         |
| 81968897     | Granted | 6895420       | 2/16/2000   | 5/17/2005  | 09/505382          | US | MANAGING OPERATIONS OF A COMPUTER SYSTEM HAVING A PLURALITY OF PARTITIONS                                                                              |
| 81969203     | Granted | 6172894       | 2/16/2000   | 1/9/2001   | 09/505082          | US | Masking Error Detection/Correction Latency In Multilevel Cache Transfers                                                                               |
| 81969818     | Granted | 6875930       | 4/18/2002   | 4/5/2005   | 10/125287          | US | APPARATUS AND METHOD FOR SHARING DATA FET FOR A FOUR-WAY MULTIPLEXER                                                                                   |
| 81969824     | Granted | 7124180       | 4/27/2000   | 10/17/2006 | 09/560032          | US | Semiconductor Memory Cell Having More Than Two Stable States                                                                                           |
| 81969827     | Granted | 6813645       | 5/24/2000   | 11/2/2004  | 09/578826          | US | Optimized Conductor Routing For Multiple Components On A Printed Circuit Board                                                                         |
|              |         |               |             |            |                    |    | Internet Usage Data Recording System And Method Employing A Configurable Rule Engine For The Processing And Correlation Of Network Data                |
| 81969830     | Granted | 7024468       | 4/27/2000   | 4/4/2006   | 09/560509          | US | INTERNET USAGE DATA RECORDING SYSTEM AND METHOD EMPLOYING A CONFIGURABLE RULE ENGINE WITH IP ADDRESS RANGE MATCHING FOR THE PROCESSING OF NETWORK DATA |
|              |         |               |             |            |                    |    | Internet Usage Data Recording System And Method With Configurable Data Collector System                                                                |

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| 81969833     | Granted | 7293083       | 4/27/2000   | 11/6/2007  | 09/559693          | US | Internet Usage Data Recording System And Method                                                                                                     |
| 81969899     | Granted | 7103626       | 5/24/2000   | 9/5/2006   | 09/980757          | US | Employing Distributed Data Processing And Data Storage                                                                                              |
| 81970013     | Granted | 7263719       | 11/29/2000  | 8/28/2007  | 09/726072          | US | Partitioning In Distributed Computer System                                                                                                         |
| 81970082     | Granted | 6792550       | 1/31/2001   | 9/14/2004  | 09/775404          | US | System And Method For Implementing Network Security Policies On A Common Network Infrastructure                                                     |
|              |         |               |             |            |                    |    | METHOD AND APPARATUS FOR PROVIDING CONTINUED OPERATION OF A MULTIPROCESSOR COMPUTER SYSTEM AFTER DETECTING IMPAIRMENT OF A PROCESSOR COOLING DEVICE |
| 81970646     | Granted | 7047531       | 7/11/2002   | 5/16/2006  | 10/194669          | US | Method And Apparatus For Automated Network Polling                                                                                                  |
| 81970751     | Granted | 6785076       | 7/17/2000   | 8/31/2004  | 09/620281          | US | Alternate Tape Repositioning Method During Data Recovery                                                                                            |
| 81970820     | Granted | 6763409       | 1/31/2001   | 7/13/2004  | 09/775233          | US | Switch-On-The-Fly GBIC Disk Channel Adapter And Disk Channel System                                                                                 |
| 81970832     | Granted | 6654908       | 4/29/2000   | 11/25/2003 | 09/563019          | US | METHOD FOR AND SYSTEM PRODUCING SHARED USAGE OF INTERCOMMUNICATION FABRIC ERROR LOGGING REGISTERS IN A MULTIPROCESSOR ENVIRONMENT                   |
| 81970892     | Granted | 6473845       | 9/28/2000   | 10/29/2002 | 09/675021          | US | SYSTEM AND METHOD FOR DYNAMICALLY UPDATING MEMORY ADDRESS MAPPINGS                                                                                  |
| 81970898     | Granted | 6751857       | 4/2/2001    | 6/22/2004  | 09/824506          | US | Conductive Contamination Reliability Solution For Assembling Substrates                                                                             |
| 81971072     | Granted | 6745274       | 4/25/2000   | 6/1/2004   | 09/558088          | US | APPARATUS AND METHOD FOR SYNCHRONIZING MULTIPLE ACCESES TO COMMON RESOURCES                                                                         |
| 81971123     | Granted | 6594745       | 1/31/2001   | 7/15/2003  | 09/775013          | US | MIRRORING AGENT ACCESSIBLE TO REMOTE HOST COMPUTERS, AND ACCESSING REMOTE DATA-STORED DEVICES, VIA A COMMUNICATIONS MEDIUM                          |
| 81971138     | Granted | 6760870       | 4/29/2000   | 7/6/2004   | 09/563007          | US | Algorithm For Resynchronizing A Bit-sliced Crossbar                                                                                                 |
| 81971144     | Granted | 6744834       | 4/28/2000   | 6/1/2004   | 09/561142          | US | Method And Apparatus For Initializing A Synchronizer For Same Frequency, Phase Unknown Data Across Multiple Bit-Sliced Interfaces                   |
| 81971192     | Granted | 6625559       | 5/1/2000    | 9/23/2003  | 09/562043          | US | System And Method For Maintaining Lock Of A Phase Locked Loop Feedback During Clock Halt                                                            |
| 81971246     | Granted | 6651180       | 4/28/2000   | 11/18/2003 | 09/560551          | US | A METHOD AND APPARATUS FOR GENERATING TIMEOUTS TO A SYSTEM BASED COUNTING INTERVALS SUPPLIED BY A SHARED COUNTING DEVICE                            |
| 81971252     | Granted | 6912679       | 4/29/2000   | 6/28/2005  | 09/562588          | US | System And Method For Electrical Data Link Testing                                                                                                  |
| 81971255     | Granted | 7346812       | 4/27/2000   | 3/18/2008  | 09/561179          | US | APPARATUS AND METHOD FOR IMPLEMENTING PROGRAMMABLE LEVELS OF ERROR SEVERITY                                                                         |
| 81971258     | Granted | 6647469       | 5/1/2000    | 11/11/2003 | 09/562191          | US | Using Read Current Transactions For Improved Performance In Directory-Based Coherent I/O Systems                                                    |

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| 81971312     | Granted | 6560673       | 1/31/2001   | 5/6/2003   | 09/775213          | US | NEW FIBRE CHANNEL UPGRADE PATH                                                                     |
| 81971318     | Granted | 6724846       | 4/28/2000   | 4/20/2004  | 09/561143          | US | Simple, High Performance, Bit-Sliced Mesochronous Synchronizer For A Source Synchronous Link       |
| 81971459     | Granted | 6928525       | 4/28/2000   | 8/9/2005   | 09/560907          | US | Per Cache Line Semaphore For Cache Access Arbitration                                              |
| 81971750     | Granted | 8140659       | 5/8/2001    | 3/20/2012  | 09/850794          | US | CALCULATING AN ESTIMATED TIME TO COMPLETE A REQUEST                                                |
| 81971762     | Granted | 6671658       | 12/23/2000  | 12/30/2003 | 09/745949          | US | Method For Service Level Estimation In An Operating Computer System                                |
| 81971771     | Granted | 7984147       | 12/29/2000  | 7/19/2011  | 09/751009          | US | Apparatus And Method For Identifying A Requested Level Of Service For A Transaction                |
| 81971828     | Granted | 6704687       | 1/31/2001   | 3/9/2004   | 09/773120          | US | Historical Results Based Method For Automatically Improving Computer System Performance            |
| 81971834     | Granted | 6628994       | 8/31/2000   | 9/30/2003  | 09/651916          | US | Method To Obtain Improved Performance By Automatic Adjustment Of Computer System Parameters        |
| 81971957     | Granted | 6658543       | 9/19/2002   | 12/2/2003  | 10/247098          | US | System And Method To Protect Vital Memory Space From Non-Malicious Writes In A Multi Domain System |
| 81972005     | Granted | 6671792       | 4/28/2000   | 12/30/2003 | 09/560909          | US | Share Masks And Alias For Directory Coherency                                                      |
| 81972008     | Granted | 6785778       | 5/13/2003   | 8/31/2004  | 10/437863          | US | Share Masks And Alias For Directory Coherency                                                      |
| 81972056     | Granted | 6718454       | 4/29/2000   | 4/6/2004   | 09/563060          | US | Parallel Rolling Prefetch Machine For I/O Cache Applications And Method Of Operations Thereof      |
| 81972203     | Granted | 6629213       | 5/1/2000    | 9/30/2003  | 09/561689          | US | APPARATUS AND METHOD USING SUB-CACHELINE TRANSACTIONS TO IMPROVE SYSTEM PERFORMANCE                |
| 81972206     | Granted | 6631428       | 5/1/2000    | 10/7/2003  | 09/562489          | US | APPARATUS AND METHOD FOR COMPLETING TRANSACTIONS IN ALL FLOW CONTROL CLASSES                       |
| 81972209     | Granted | 6799287       | 5/1/2000    | 9/28/2004  | 09/562133          | US | Method And Apparatus For Verifying Error Correcting Codes                                          |
| 81972242     | Granted | 7325164       | 9/25/2003   | 1/29/2008  | 10/670620          | US | SYSTEM AND METHOD FOR MULTIPLE CYCLE CAPTURE OF CHIP STATE                                         |
| 81973451     | Granted | 7640153       | 6/4/2001    | 12/29/2009 | 09/874170          | US | NETWORKED CLIENT-SERVER ARCHITECTURE FOR TRANSPARENTLY TRANSFORMING AND EXECUTING APPLICATIONS     |
| 81973568     | Granted | 6772363       | 3/12/2001   | 8/3/2004   | 09/804954          | US | Fast Failover Database Tier In A Multi-Tier Transaction Processing System                          |
| 81973643     | Granted | 6757774       | 3/17/2001   | 6/29/2004  | 09/811194          | US | HIGH-AVAILABILITY, HIGHLY-REDUNDANT STORAGE SYSTEM ENCLOSURE                                       |
| 81974126     | Granted | 6851074       | 4/30/2001   | 2/1/2005   | 09/845469          | US | System And Method For Recovering From Memory Failures In Computer Systems                          |
| 81974177     | Granted | 7421515       | 1/17/2002   | 9/2/2008   | 10/051397          | US | Method And System For Communications Network                                                       |
| 81974183     | Granted | 7743126       | 6/28/2001   | 6/22/2010  | 09/895235          | US | Migrating Recovery Modules In A Distributed Computing Environment                                  |

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| 81974330     | Granted | 6684177       | 5/10/2001   | 1/27/2004  | 09/854212          | US | COMPUTER IMPLEMENTED SCALABLE, INCREMENTAL AND PARALLEL CLUSTERING BASED ON WEIGHTED DIVIDE AND CONQUER                                                                |
| 81974582     | Granted | 6862691       | 9/19/2001   | 3/1/2005   | 09/957268          | US | Redundant Component System And Method For Facilitating Endsystem Functionality                                                                                         |
| 81974615     | Granted | 7016971       | 5/24/2000   | 3/21/2006  | 09/980760          | US | A CONGESTION MANAGEMENT IN A DISTRIBUTED COMPUTER SYSTEM MULTIPLYING CURRENT VARIABLE INJECTION RATE WITH A CONSTANT TO SET NEW VARIABLE INJECTION RATE AT SOURCE NODE |
| 81974741     | Granted | 6877162       | 7/31/2000   | 4/5/2005   | 09/628919          | US | Method And System For Extendable Class-Based Shared Data Types                                                                                                         |
| 81974759     | Granted | 6278627       | 2/15/2000   | 8/21/2001  | 09/504138          | US | Multiple Input Bit-Line Detection With Phase Stealing Latch In A Memory Design                                                                                         |
| 81974762     | Granted | 7757066       | 12/29/2000  | 7/13/2010  | 09/751372          | US | System And Method For Executing Variable Latency Load Operations In A Data Processor                                                                                   |
| 81975068     | Granted | 6715014       | 5/25/2000   | 3/30/2004  | 09/578964          | US | MODULE ARRAY                                                                                                                                                           |
| 81976067     | Granted | 6600616       | 4/25/2001   | 7/29/2003  | 09/843129          | US | Method For Reduction Of Off-track Errors Or Write Failures In Data Storage Tape Systems                                                                                |
| 81976325     | Granted | 6889335       | 4/7/2001    | 5/3/2005   | 09/828041          | US | Memory Controller Receiver Circuitry With Tri-State Noise Immunity                                                                                                     |
| 81976379     | Granted | 6647449       | 10/5/2000   | 11/11/2003 | 09/680551          | US | System, Method And Circuit For Performing Round Robin Arbitration                                                                                                      |
| 81976682     | Granted | 6310499       | 7/17/2000   | 10/30/2001 | 09/617373          | US | Methods And Apparatus For Adjusting The Deadline Between Non-Overlapping Clock Signals                                                                                 |
| 81977060     | Granted | 6650961       | 8/7/2001    | 11/18/2003 | 09/924201          | US | Disk Cartridge Data Storage Methods And Apparatus                                                                                                                      |
| 81977066     | Granted | 7136720       | 9/4/2003    | 11/14/2006 | 10/656040          | US | Disk Cartridge Data Storage Methods And Apparatus                                                                                                                      |
| 81977141     | Granted | 6944807       | 3/25/2002   | 9/13/2005  | 10/107291          | US | METHOD AND APPARATUS FOR ACHIEVING HIGHER PRODUCT YIELDS BY USING FRACTIONAL PORTIONS OF IMBEDDED MEMORY ARRAYS                                                        |
| 81977177     | Granted | 6450438       | 4/25/2001   | 9/17/2002  | 09/843209          | US | Apparatus And Methods For Forming A Tape Pack                                                                                                                          |
| 81977306     | Granted | 7076647       | 6/7/2001    | 7/11/2006  | 09/875289          | US | Dynamic Kernel Tunables                                                                                                                                                |
| 81977366     | Granted | 7003559       | 10/23/2000  | 2/21/2006  | 09/694843          | US | System And Method For Determining Probable Network Paths Between Nodes In A Network Topology                                                                           |
| 81977435     | Granted | 7055074       | 4/25/2001   | 5/30/2006  | 09/842333          | US | Device To Inhibit Duplicate Cache Repairs                                                                                                                              |
| 81977510     | Granted | 6851024       | 8/17/2000   | 2/1/2005   | 09/641383          | US | Exclusive Caching In Computer Systems                                                                                                                                  |
| 81977516     | Granted | 8554604       | 8/30/2001   | 10/8/2013  | 09/944969          | US | Method And Apparatus For Modeling A Business Process                                                                                                                   |
| 81977549     | Granted | 7530086       | 12/12/2000  | 5/5/2009   | 09/734996          | US | Media Program Timing And Identity Delivery Method And System                                                                                                           |
| 81977879     | Granted | 6684218       | 11/21/2000  | 1/27/2004  | 09/718951          | US | Standard Specific URL                                                                                                                                                  |

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| 81977951     | Granted | 6392446       | 6/1/2001    | 5/21/2002  | 09/872296          | US | Device And Method For Reducing A Time Constant Of A Data Bus During A Voltage Transition                                                                   |
| 81978071     | Granted | 8621480       | 12/16/2004  | 12/31/2013 | 11/012686          | US | Load Balancer With Starvation Avoidance                                                                                                                    |
| 81978491     | Granted | 6418068       | 1/19/2001   | 7/9/2002   | 09/766354          | US | Self-Healing Memory                                                                                                                                        |
| 81978512     | Granted | 6721720       | 2/22/2001   | 4/13/2004  | 09/790921          | US | METHODS AND STRUCTURE FOR CHARACTERIZATION OF BAYESIAN BELIEF NETWORKS                                                                                     |
| 81978683     | Granted | 6662281       | 1/31/2001   | 12/9/2003  | 09/774974          | US | REDUNDANT BACKUP DEVICE                                                                                                                                    |
| 81978701     | Granted | 6483710       | 5/22/2001   | 11/19/2002 | 09/862359          | US | Method And Apparatus To Facilitate Removal And Installation Of Removable Components                                                                        |
| 81978743     | Granted | 6757764       | 4/18/2001   | 6/29/2004  | 09/836986          | US | METHOD AND APPARATUS FOR TRANSFERRING INFORMATION USING A CONSTANT FREQUENCY                                                                               |
| 81978752     | Granted | 6724409       | 11/16/2000  | 4/20/2004  | 09/714330          | US | TREE-BASED GRAPHICAL USER INTERFACE FOR CREATING AND EDITING MACHINE CONTROL SEQUENCES                                                                     |
| 81978758     | Granted | 6741907       | 3/23/2001   | 5/25/2004  | 09/815890          | US | Inventory Control Apparatus And Method For A Data Storage System                                                                                           |
| 81978797     | Granted | 7104618       | 12/16/2005  | 9/12/2006  | 11/305708          | US | Reconfigurable Data Cartridge Import/export Drawer                                                                                                         |
| 81978809     | Granted | 6643091       | 3/5/2001    | 11/4/2003  | 09/799232          | US | AUTOMATED DATA CARTRIDGE IMPORT /EXPORT DRAWER                                                                                                             |
| 81978872     | Granted | 6618348       | 12/5/2000   | 9/9/2003   | 09/729870          | US | Rear-Facing Autochanger Bar Code Reader                                                                                                                    |
| 81978890     | Granted | 6523749       | 3/6/2001    | 2/25/2003  | 09/800248          | US | Apparatus And Method For Retrieving Data Cartridge Information External To A Media Storage System                                                          |
| 81978923     | Granted | 6870797       | 1/4/2001    | 3/22/2005  | 09/754955          | US | MEDIA STORAGE SYSTEM USING A TRANSPONDER FOR TRANSMITTING DATA SIGNAL                                                                                      |
| 81978941     | Granted | 6758400       | 11/20/2000  | 7/6/2004   | 09/716878          | US | BAR CODE READING SYSTEM                                                                                                                                    |
| 81978998     | Granted | 7058860       | 6/29/2001   | 6/6/2006   | 09/896495          | US | SYSTEM AND METHOD OF AUTOMATIC PARAMETER COLLECTION AND PROBLEM SOLUTION GENERATION FOR COMPUTER STORAGE DEVICES                                           |
| 81979247     | Granted | 6466498       | 1/10/2001   | 10/15/2002 | 09/758875          | US | Discontinuity-based Memory Cell Sensing                                                                                                                    |
| 81979373     | Granted | 6813635       | 10/13/2000  | 11/2/2004  | 09/687779          | US | System And Method For Distributing Load Among Redundant Independent Stateful World Wide Web Server Sites                                                   |
| 81979427     | Granted | 6604370       | 8/31/2001   | 8/12/2003  | 09/943942          | US | Variably Configured Sprayjet Cooling System                                                                                                                |
| 81979436     | Granted | 6612120       | 5/31/2002   | 9/2/2003   | 10/159735          | US | Spray Cooling With Local Control Of Nozzles                                                                                                                |
| 81979442     | Granted | 6684206       | 5/18/2001   | 1/27/2004  | 09/861452          | US | OLAP-Based Web Access Analysis Method And System                                                                                                           |
| 81979445     | Granted | 7171406       | 10/29/2003  | 1/30/2007  | 10/695681          | US | Olap-based Web Access Analysis Method And System                                                                                                           |
| 81979451     | Granted | 7483940       | 4/11/2005   | 1/27/2009  | 11/102999          | US | Dynamic Agent With Embedded Web Server And Mark-up Language Support For E-commerce Automation                                                              |
| 81980060     | Granted | 6817014       | 4/11/2001   | 11/9/2004  | 09/833249          | US | ANALYSIS OF EXECUTABLE PROGRAM CODE USING COMPILER-GENERATED FUNCTION ENTRY POINTS AND ENDPOINTS WITH OTHER SOURCES OF FUNCTION ENTRY POINTS AND ENDPOINTS |



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| 81980063     | Granted | 6918110       | 4/11/2001   | 7/12/2005  | 09/833248          | US | DYNAMIC INSTRUMENTATION OF AN EXECUTABLE PROGRAM BY MEANS OF CAUSING A BREAKPOINT AT THE ENTRY POINT OF A FUNCTION AND PROVIDING INSTRUMENTATION CAPABILITY |
| 81980066     | Granted | 6621310       | 10/24/2000  | 9/16/2003  | 09/696105          | US | Reducing Power Consumption Variability Of Precharge-Pull-down Busses                                                                                        |
| 81980117     | Granted | 6721736       | 11/15/2000  | 4/13/2004  | 09/713768          | US | METHODS, COMPUTER SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR CONFIGURING A META SEARCH ENGINE                                                                 |
| 81980135     | Granted | 6898733       | 10/31/2001  | 5/24/2005  | 09/999794          | US | Process Activity And Error Monitoring System And Method                                                                                                     |
| 81980177     | Granted | 6763477       | 7/31/2000   | 7/13/2004  | 09/629494          | US | A METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING DATA USING A SELF CLOCKING LINK PROTOCOL                                                              |
| 81980243     | Granted | 6509788       | 3/16/2001   | 1/21/2003  | 09/811255          | US | System And Method Utilizing On-chip Voltage Controlled Frequency Modulation To Manage Power Consumption                                                     |
| 81980627     | Granted | 6625702       | 4/7/2001    | 9/23/2003  | 09/827766          | US | Memory Controller With Support For Memory Modules Comprised Of Non-Homogeneous Data Width RAM Devices                                                       |
| 81980636     | Granted | 6539527       | 3/19/2001   | 3/25/2003  | 09/812661          | US | System And Method Of Determining The Noise Sensitivity Of An Integrated Circuit                                                                             |
| 81980687     | Granted | 7577581       | 10/31/2000  | 8/18/2009  | 09/703459          | US | Method For Targeting Promotions To Individual Associated With A Vehicle                                                                                     |
| 81980864     | Granted | 6795855       | 4/5/2001    | 9/21/2004  | 09/827150          | US | Non-Root Users Execution Of Root Commands                                                                                                                   |
| 81980867     | Granted | 6886100       | 5/15/2001   | 4/26/2005  | 09/855937          | US | Disabling Tool Execution Via Roles                                                                                                                          |
| 81980882     | Granted | 6915520       | 4/6/2001    | 7/5/2005   | 09/828439          | US | Java C++ Proxy Objects                                                                                                                                      |
| 81982871     | Granted | 6633834       | 8/29/2001   | 10/14/2003 | 09/940614          | US | Baselining Of Data Collector Data                                                                                                                           |
| 81982880     | Granted | 7685278       | 12/18/2001  | 3/23/2010  | 10/026061          | US | Adapting Bayesian Network Parameters On-line In A Dynamic Environment                                                                                       |
| 81982994     | Granted | 7120678       | 2/27/2001   | 10/10/2006 | 09/794376          | US | Method And Apparatus For Configurable Data Collection On A Computer Network                                                                                 |
| 81982997     | Granted | 6868083       | 1/19/2001   | 3/15/2005  | 09/784226          | US | Method And System For Packet Communication Employing Path Diversity                                                                                         |
| 81983168     | Granted | 6886172       | 4/5/2001    | 4/26/2005  | 09/827033          | US | METHOD FOR MAPPING PROCEDURAL C++ CODE TO JAVA OBJECT-ORIENTED CLASSES                                                                                      |
| 81983378     | Granted | 8005926       | 6/29/2005   | 8/23/2011  | 11/169971          | US | Tiered Web Site With Web-tier Admission Control Based On Utilization Data Generated On Application Tier                                                     |
| 81983570     | Granted | 6718392       | 10/24/2000  | 4/6/2004   | 09/695634          | US | Queue Pair Partitioning In Distributed Computer System                                                                                                      |
| 81983804     | Granted | 6868481       | 10/31/2000  | 3/15/2005  | 09/704176          | US | Cache Coherence Protocol For A Multiple Bus Multiprocessor System                                                                                           |
| 81983810     | Granted | 7373457       | 2/1/2005    | 5/13/2008  | 11/049306          | US | Cache Coherence Protocol For A Multiple Bus Multiprocessor System                                                                                           |

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| 81984005     | Granted   | 6954928       | 8/8/2001    | 10/11/2005 | 09/924773          | US | Method For Selecting A Set Of Patches To Update A System Of Programs                                    |
| 81984299     | Granted   | 6667882       | 5/15/2002   | 12/23/2003 | 10/144785          | US | Cooling Assembly For A Heat Producing Assembly                                                          |
| 81984374     | Granted   | 7251780       | 6/1/2005    | 7/31/2007  | 11/141409          | US | DYNAMIC WEB CONTENT UNFOLDING IN WIRELESS INFORMATION GATEWAYS                                          |
| 81984692     | Granted   | 6595014       | 8/31/2001   | 7/22/2003  | 09/943797          | US | Spray Cooling System With Cooling Regime Detection                                                      |
| 81984695     | Granted   | 6633491       | 8/17/2001   | 10/14/2003 | 09/932372          | US | Support For Varying Sizes Of Memory Cards For Shock And Vibration                                       |
| 81985124     | Granted   | 7734739       | 4/20/2001   | 6/8/2010   | 09/838239          | US | Method And System For Consolidating Network Topologies In Duplicate IP Networks                         |
| 81986303     | Granted   | 6981231       | 2/22/2002   | 12/27/2005 | 10/079508          | US | System And Method To Reduce Leakage Power In An Electronic Device                                       |
| 81986420     | Granted   | 6950812       | 9/17/2001   | 9/27/2005  | 09/954755          | US | Determining Accuracy Of A Classifier                                                                    |
| 81986423     | Granted   | 6912555       | 1/18/2002   | 6/28/2005  | 10/053987          | US | METHOD FOR CONTENT MINING OF SEMI-STRUCTURED DOCUMENTS                                                  |
| 81986426     | Granted   | 7003725       | 7/13/2001   | 2/21/2006  | 09/905610          | US | METHOD AND SYSTEM FOR NORMALIZING DIRTY TEXT IN A DOCUMENT                                              |
| 81986432     | Granted   | 7424461       | 6/28/2001   | 9/9/2008   | 09/896036          | US | Multi-module Genetic Programming With Multiple Genetic Data Representations                             |
| 81986435     | Granted   | 6804570       | 2/4/2002    | 10/12/2004 | 10/067595          | US | Predicting Manufacturing Process Failures                                                               |
| 81986480     | Published |               | 5/9/2001    |            | 09/852611          | US | An On-line Shopping Conversion Simulation Module                                                        |
| 81986483     | Granted   | 6701333       | 7/17/2001   | 3/2/2004   | 09/908388          | US | METHOD OF EFFICIENT MIGRATION FROM ONE CATEGORIZATION HIERARCHY TO ANOTHER HIERARCHY                    |
| 81986486     | Granted   | 6772374       | 4/30/2001   | 8/3/2004   | 09/846007          | US | CONTINUOUS LANGUAGE-BASED PREDICTION AND TROUBLESHOOTING TOOL                                           |
| 81986504     | Granted   | 6853835       | 8/13/2001   | 2/8/2005   | 09/928615          | US | Asymmetric Wireless Communication System Using Two Different Radio Technologies                         |
| 81986606     | Granted   | 7013462       | 5/10/2001   | 3/14/2006  | 09/854209          | US | METHOD TO MAP AN INVENTORY MANAGEMENT SYSTEM TO A CONFIGURATION MANAGEMENT SYSTEM                       |
| 81986609     | Granted   | 6513145       | 7/31/2001   | 1/28/2003  | 09/920416          | US | METHOD FOR ESTIMATING THE POWER CONSUMED IN A MICROPROCESSOR                                            |
| 81986627     | Granted   | 7003441       | 7/31/2001   | 2/21/2006  | 09/920382          | US | METHOD FOR DERIVING THE BENCHMARK PROGRAM FOR ESTIMATING THE MAXIMUM POWER CONSUMED IN A MICROPROCESSOR |
| 81986687     | Granted   | 6918012       | 8/28/2001   | 7/12/2005  | 09/942328          | US | STREAMLINED CACHE COHERENCY PROTOCOL SYSTEM AND METHOD FOR A MULTIPLE PROCESSOR SINGLE CHIP DEVICE      |
| 81986741     | Granted   | 6708515       | 8/31/2001   | 3/23/2004  | 09/945046          | US | Passive Spray Coolant Pump                                                                              |
| 81986747     | Granted   | 6687126       | 4/30/2001   | 2/3/2004   | 09/845433          | US | Cooling Plate Arrangement For Electronic Components                                                     |
| 81986750     | Granted   | 6600220       | 5/14/2001   | 7/29/2003  | 09/854544          | US | POWER DISTRIBUTION IN MULTI-CHIP MODULES                                                                |

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| 81986753     | Granted | 6886117       | 11/20/2001  | 4/26/2005  | 09/988631          | US | Field Repairable Embedded Memory In System-On-A-Chip                                                                                                                                 |
| 81986756     | Granted | 6910155       | 6/25/2001   | 6/21/2005  | 09/892291          | US | System And Method For Chip Testing                                                                                                                                                   |
| 81986792     | Granted | 6862022       | 7/20/2001   | 3/1/2005   | 09/910645          | US | Method And System For Automatically Selecting A Vertical Refresh Rate For A Video Display Monitor                                                                                    |
| 81987041     | Granted | 6883029       | 2/14/2001   | 4/19/2005  | 09/783414          | US | SEPARATE READ AND WRITE SERVERS WITH READ ACCESS DURING WRITES                                                                                                                       |
| 81987047     | Granted | 6625604       | 3/9/2001    | 9/23/2003  | 09/803583          | US | Namespace Service In A Distributed File System Using A Database Management System                                                                                                    |
| 81987053     | Granted | 6842754       | 4/17/2001   | 38363      | 09/836828          | US | Lease Enforcement In A Distributed File System                                                                                                                                       |
| 81987938     | Granted | 6701402       | 3/30/2001   | 3/2/2004   | 09/820727          | US | SELECTIVELY OPERATING A HOST'S DEVICE CONTROLLER IN A FIRST MODE OR A SECOND MODE                                                                                                    |
| 81988415     | Granted | 8117107       | 6/29/2001   | 2/14/2012  | 09/895690          | US | Method For Auction Based Simulation To Extract Demand Curve                                                                                                                          |
| 81988421     | Granted | 6963832       | 10/9/2001   | 11/8/2005  | 09/974645          | US | Meaning Token Dictionary For Automatic Speech Recognition Curve                                                                                                                      |
| 81988553     | Granted | 6981104       | 7/12/2002   | 12/27/2005 | 10/195090          | US | Method For Conducting Checkpointing Within A Writeback Cache                                                                                                                         |
| 81989051     | Granted | 6883091       | 5/30/2001   | 4/19/2005  | 09/871329          | US | Reducing Boot Times Via Intrusion Monitoring                                                                                                                                         |
| 81989060     | Granted | 6859887       | 5/31/2001   | 2/22/2005  | 09/872454          | US | Method To Invoke Wide-Area Objects In Distributed Computer Systems                                                                                                                   |
| 81989063     | Granted | 6928580       | 7/9/2001    | 8/9/2005   | 09/901972          | US | Distributed Data Center System Protocol For Continuity Of Service In The Event Of Disaster Failures                                                                                  |
| 81989123     | Granted | 6609083       | 6/1/2001    | 8/19/2003  | 09/870673          | US | Adaptive Performance Data Measurement And Collections                                                                                                                                |
| 81989291     | Granted | 6710958       | 10/26/2001  | 3/23/2004  | 10/054626          | US | Optimized Sparing Table And Method                                                                                                                                                   |
| 81989309     | Granted | 6381406       | 3/2/2001    | 4/30/2002  | 09/798402          | US | Adaptive Synchronous DC Fan Speed Controller                                                                                                                                         |
| 81989438     | Granted | 6763338       | 4/5/2002    | 7/13/2004  | 10/116835          | US | MACHINE DECISIONS BASED ON PREFERENTIAL VOTING TECHNIQUES                                                                                                                            |
| 81989675     | Granted | 7054934       | 10/26/2001  | 5/30/2006  | 10/046519          | US | Tailorable Optimization Using Model Descriptions Of Services And Servers In A Computing Environment                                                                                  |
| 81989678     | Granted | 7039705       | 10/26/2001  | 5/2/2006   | 10/044882          | US | Representing Capacities And Demands In A Layered Computing Environment Using Normalized Values                                                                                       |
| 81989681     | Granted | 7035930       | 10/26/2001  | 4/25/2006  | 10/046516          | US | METHOD AND FRAMEWORK FOR GENERATING AN OPTIMIZED DEPLOYMENT OF SOFTWARE APPLICATIONS IN A DISTRIBUTED COMPUTING ENVIRONMENT USING LAYERED MODEL DESCRIPTIONS OF SERVICES AND SERVERS |
| 81989786     | Granted | 8560512       | 7/18/2002   | 10/15/2013 | 10/199664          | US | Finding Matching Locations, Trajectories Or Attributes While Maintaining Privacy Of Non-matching Information                                                                         |
| 81989792     | Granted | 6584401       | 11/27/2001  | 6/24/2003  | 09/995349          | US | Automatic Gathering And Analysis Of Data On Commute Paths                                                                                                                            |

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| 81990611     | Granted | 6675260       | 10/31/2001  | 1/6/2004   | 09/997385          | US | Virtual Electronic Data Library Supporting Mixed Drive Types Using Virtual Libraries Within A Single Library                                          |
| 81990794     | Granted | 6810114       | 7/10/2001   | 10/26/2004 | 09/902036          | US | System For Updating A Voicemail Network                                                                                                               |
| 81990812     | Granted | 6990612       | 7/18/2002   | 1/24/2006  | 10/198868          | US | System And Method For Preventing Software Errors                                                                                                      |
| 81990860     | Granted | 6667885       | 7/20/2001   | 12/23/2003 | 09/909512          | US | Attachment Of A Single Heat Dissipation Device To Multiple Components With Vibration Isolation                                                        |
| 81991103     | Granted | 6976073       | 11/29/2001  | 12/13/2005 | 09/995774          | US | Transparent Remote Data Storage Device And Method                                                                                                     |
| 81991115     | Granted | 6907519       | 3/19/2002   | 6/14/2005  | 10/100874          | US | Systems And Methods For Integrating Emulated And Native Code                                                                                          |
| 81991226     | Granted | 7313503       | 2/19/2002   | 12/25/2007 | 10/076635          | US | DESIGNING LAYOUT FOR INTERNET DATACENTER COOLING                                                                                                      |
| 81991301     | Granted | 6990593       | 7/31/2001   | 1/24/2006  | 09/919134          | US | METHOD FOR DIVERTING POWER RESERVES AND SHIFTING ACTIVITIES ACCORDING TO ACTIVITY PRIORITIES IN A SERVER CLUSTER IN THE EVENT OF A POWER INTERRUPTION |
|              |         |               |             |            |                    |    |                                                                                                                                                       |
| 81991304     | Granted | 7478394       | 6/4/2001    | 1/13/2009  | 09/873875          | US | Context-corrupting Context Switching                                                                                                                  |
| 81991499     | Granted | 6832303       | 1/3/2002    | 12/14/2004 | 10/033778          | US | Method And System For Managing An Allocation Of A Portion Of A Memory                                                                                 |
| 81991601     | Granted | 6947237       | 10/9/2001   | 9/20/2005  | 09/974602          | US | Worm Magnetic Tape With Cartridge Memory System And Method                                                                                            |
| 81991664     | Granted | 6742166       | 7/20/2001   | 5/25/2004  | 09/909541          | US | System And Method For Evaluating Functional Coverage Linked To A Verification Test Plan                                                               |
| 81991667     | Granted | D458924       | 7/2/2001    | 6/18/2002  | 29/144444          | US | Disk Drive Carrier                                                                                                                                    |
| 81991751     | Granted | 6944659       | 3/1/2001    | 9/13/2005  | 09/795101          | US | METHOD AND APPARATUS FOR GATHERING AND TRANSMITTING INFORMATION FOR EVENTS RELATING TO A NETWORKED APPLIANCE                                          |
|              |         |               |             |            |                    |    |                                                                                                                                                       |
| 81992420     | Granted | 6772161       | 12/19/2001  | 8/3/2004   | 10/024937          | US | Object-Level Migration In A Partition-Based Distributed File System                                                                                   |
| 81992423     | Granted | 6775672       | 12/19/2001  | 8/10/2004  | 10/024940          | US | Updating References To A Migrated Object In A Partition-Based Distributed File System                                                                 |
| 81992426     | Granted | 6775673       | 12/19/2001  | 8/10/2004  | 10/024941          | US | Logical Volume-Level Migration In A Partition-Based Distributed File System                                                                           |
|              |         |               |             |            |                    |    |                                                                                                                                                       |
| 81992498     | Granted | 6665166       | 3/15/2001   | 12/16/2003 | 09/809409          | US | Systems With Enhanced Electrostatic Discharge Protection                                                                                              |
| 81992846     | Granted | 7099866       | 11/16/2001  | 8/29/2006  | 09/987912          | US | Method Of Generating And Presenting Kernel Data                                                                                                       |
| 81992981     | Granted | 6654667       | 5/22/2001   | 11/25/2003 | 09/864036          | US | METHOD AND SYSTEM TO PRE-FETCH COMPRESSED MEMORY BLOCKS SUING POINTERS                                                                                |
| 81992984     | Granted | 6658549       | 5/22/2001   | 12/2/2003  | 09/863988          | US | METHOD AND SYSTEM ALLOWING A SINGLE ENTITY TO MANAGE MEMORY COMPRISING COMPRESSED AND UNCOMPRESSED DATA                                               |

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| 81992987     | Granted | 7634599       | 6/29/2001   | 12/15/2009 | 09/895345 US       | US | Method For Improving Inline Compression Bandwidth For High Speed Buses                                                                                                                                                                    |
| 81992993     | Granted | 6829691       | 6/28/2002   | 12/7/2004  | 10/187337 US       | US | System For Compressing/Decompressing Data                                                                                                                                                                                                 |
| 81993035     | Granted | 6832927       | 10/3/2001   | 12/21/2004 | 09/970194 US       | US | Low Profile PCI Hot Plug Actuator Assembly                                                                                                                                                                                                |
| 81993287     | Granted | 6826162       | 9/28/2001   | 11/30/2004 | 09/967692 US       | US | Locating And Mapping Wireless Network Devices Via Wireless Gateways                                                                                                                                                                       |
| 81993302     | Granted | 7689710       | 6/12/2001   | 3/30/2010  | 09/880632 US       | US | METHOD AND SYSTEM FOR A FRONT-END MODULAR TRANSMISSION CONTROL PROTOCOL (TCP) HANDOFF DESIGN IN A STREAMS BASED TRANSMISSION CONTROL PROTOCOL/INTERNET PROTOCOL (TCP/IP) IMPLEMENTATION                                                   |
| 81993359     | Granted | 7685348       | 8/7/2001    | 3/23/2010  | 09/924163 US       | US | Dedicated Server Management Card With Hot Swap Functionality                                                                                                                                                                              |
| 81993368     | Granted | 6636422       | 12/11/2001  | 10/21/2003 | 10/014905 US       | US | Data Storage Systems With Enhanced Cooling                                                                                                                                                                                                |
| 81993548     | Granted | 6651521       | 5/1/2001    | 11/25/2003 | 09/846620 US       | US | Method For Sampling And Testing Data Centers For Metallic Particulates                                                                                                                                                                    |
| 81993551     | Granted | 6923075       | 9/8/2003    | 8/2/2005   | 10/658510 US       | US | METHODS FOR SAMPLING AND TESTING DATA CENTERS FOR METALLIC PARTICULATES                                                                                                                                                                   |
| 81993620     | Granted | 6661203       | 11/12/2001  | 12/9/2003  | 10/011140 US       | US | BATTERY CHARGING AND DISCHARGING SYSTEM                                                                                                                                                                                                   |
| 81993740     | Granted | 7594233       | 6/28/2002   | 9/22/2009  | 10/183443 US       | US | Processing Thread Launching Using Volunteer Information                                                                                                                                                                                   |
| 81993806     | Granted | 6732241       | 9/7/2001    | 5/4/2004   | 09/948362 US       | US | Technique For Migrating Data Between Storage Devices For Reduced Power Consumption                                                                                                                                                        |
| 81993905     | Granted | 7395323       | 8/7/2001    | 7/1/2008   | 09/924029 US       | US | System And Method For Providing Network Address Information In A Server System                                                                                                                                                            |
| 81993908     | Granted | 6968470       | 8/7/2001    | 11/22/2005 | 09/924024 US       | US | System And Method For Power Management In A Server System                                                                                                                                                                                 |
| 81993929     | Granted | 7612990       | 3/10/2003   | 11/3/2009  | 10/384834 US       | US | LCD PANEL FOR A SERVER SYSTEM                                                                                                                                                                                                             |
| 81993932     | Granted | 7317620       | 10/3/2003   | 1/8/2008   | 10/678826 US       | US | LCD PANEL FOR A SERVER SYSTEM                                                                                                                                                                                                             |
| 81994103     | Granted | 6614133       | 10/31/2001  | 9/2/2003   | 10/001582 US       | US | POWER SYSTEM WITH PLURAL PARALLEL POWER SUPPLIES WITH AT LEAST ONE POWER SUPPLY IN STANDBY MADE FOR ENERGY EFFICIENCY                                                                                                                     |
| 81994115     | Granted | 6693858       | 3/21/2001   | 2/17/2004  | 09/814236 US       | US | Data Cartridge Detector                                                                                                                                                                                                                   |
| 81994244     | Granted | 7171396       | 4/4/2002    | 1/30/2007  | 10/116338 US       | US | METHOD AND PROGRAM PRODUCT FOR SPECIFYING THE DIFFERENT DATA ACCESS ROUTE FOR THE FIRST DATA SET INCLUDES STORING AN INDICATION OF THE DIFFERENT ACCESS FOR THE FIRST DATA SET PROVIDING ALTERNATIVE DATA ACCESS ROUTES TO A DATA STORAGE |
| 81994424     | Granted | 6851110       | 6/7/2001    | 2/1/2005   | 09/876655 US       | US | Optimizing An Executable Computer Program Having Address-Bridging Code Segments                                                                                                                                                           |

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| 81994430     | Granted | 6795964       | 6/18/2001   | 9/21/2004  | 09/883710          | US | EDGE PROFILING FOR EXECUTABLE PROGRAM CODE HANDLING BRANCHES THROUGH STUB CODE SEGMENTS                                                                        |
| 81994538     | Granted | 6931632       | 11/8/2001   | 8/16/2005  | 10/005302          | US | Instrumentation Of Code Having Predicated Branch-Call Instructions                                                                                             |
| 81994541     | Granted | 6934943       | 10/18/2001  | 8/23/2005  | 10/004015          | US | Optimization Of Control Transfers To Dynamically Loaded Modules                                                                                                |
| 81994784     | Granted | 7046587       | 8/23/2001   | 5/16/2006  | 09/938155          | US | Systems And Methods For Providing Automatic Access To Data Media In A Data Storage System                                                                      |
| 81994904     | Granted | 6778351       | 5/18/2001   | 8/17/2004  | 09/861455          | US | System And Method Of Redundant Cabling In A Media Storage System                                                                                               |
| 81994925     | Granted | 6733223       | 8/23/2001   | 5/11/2004  | 09/938053          | US | Systems And Methods For Providing A Removable Media Handling System In A Data Storage System                                                                   |
| 81994997     | Granted | 7111282       | 6/12/2001   | 9/19/2006  | 09/880327          | US | INSTRUMENTING A SOFTWARE PROGRAM AND COLLECTING DATA FROM THE INSTRUMENTED SOFTWARE PROGRAM BY TYPE                                                            |
| 81995120     | Granted | 6907505       | 7/31/2002   | 6/14/2005  | 10/209822          | US | Immediately Available, Statically Allocated, Full-logical-unit Copy With A Transient, Snapshot-copy-like Intermediate Stage                                    |
| 81995162     | Granted | 6901303       | 7/31/2001   | 5/31/2005  | 09/919659          | US | METHOD AND APPARATUS FOR CONTROLLING FANS AND POWER SUPPLIES TO PROVIDE ACCELERATED RUN-IN TESTING                                                             |
| 81995168     | Granted | 7100160       | 10/19/2001  | 8/29/2006  | 09/981906          | US | Method And System For Implementing Host-dependent SCSI Behavior In A Heterogeneous Host Environment                                                            |
| 81995729     | Granted | 7370308       | 10/27/2005  | 5/6/2008   | 11/261951          | US | Integrated Circuit Analysis Method And Program Product                                                                                                         |
| 81995780     | Granted | 7962950       | 6/29/2001   | 6/14/2011  | 09/896019          | US | System And Method For File System Mandatory Access Control                                                                                                     |
| 81995903     | Granted | 7058858       | 10/26/2001  | 6/6/2006   | 10/005555          | US | Systems And Methods For Providing Automated Diagnostic Services For A Cluster Computer System                                                                  |
| 81995969     | Granted | 7062558       | 11/13/2001  | 6/13/2006  | 09/991340          | US | Method And System For Enabling Resource Sharing In A Communication Network Having A Plurality Of Application Environments                                      |
| 81995972     | Granted | 7310672       | 11/13/2001  | 12/18/2007 | 09/991339          | US | METHOD AND SYSTEM FOR EXPLOITING SERVICE LEVEL OBJECTIVES TO ENABLE RESOURCE SHARING IN A COMMUNICATION NETWORK HAVING A PLURALITY OF APPLICATION ENVIRONMENTS |
| 81996038     | Granted | 7502839       | 9/28/2001   | 3/10/2009  | 09/968437          | US | MODULE-BUILDING METHOD FOR DESIGNING INTERCONNECT FABRICS                                                                                                      |
| 81996044     | Granted | 7096209       | 5/10/2001   | 8/22/2006  | 09/854084          | US | Generalized Segmentation Method For Estimation/optimization Problem                                                                                            |

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| 81996053     | Granted   | 8799052       | 5/10/2001   | 8/5/2014   | 09/853961          | US | Method And System For Deterministic Sampling With A Specific Distribution                                                                       |
| 81996110     | Granted   | D482690       | 3/21/2001   | 11/25/2003 | 29/138918          | US | Retaining Mechanism (amended)                                                                                                                   |
| 81996284     | Granted   | 7310673       | 12/21/2001  | 12/18/2007 | 10/032105          | US | NETWORK RESOURCE ASSIGNMENT SYSTEM AND METHOD                                                                                                   |
| 81996422     | Granted   | 6889349       | 8/22/2001   | 5/3/2005   | 09/934891          | US | Digital Event Sampling Circuit And Method                                                                                                       |
| 81996425     | Granted   | 6907534       | 6/29/2001   | 6/14/2005  | 09/894142          | US | MINIMIZING POWER CONSUMPTION IN PIPELINED CIRCUIT BY SHUTTING DOWN PIPELINED CIRCUIT IN RESPONSE TO PREDETERMINED PERIOD OF TIME HAVING EXPIRED |
| 81996431     | Granted   | 6851064       | 8/22/2001   | 2/1/2005   | 09/934615          | US | Fine-Grained Thermal Control In Memory Subsystems                                                                                               |
| 81996482     | Granted   | 6851910       | 7/24/2002   | 2/8/2005   | 10/202731          | US | Cartridge-handling Apparatus                                                                                                                    |
| 81996680     | Granted   | 7197762       | 10/31/2001  | 3/27/2007  | 10/003747          | US | Method, Computer Readable Medium, And Node For A Three-layered Intrusion Prevention System For Detecting Network Exploits                       |
| 81996842     | Granted   | 6836871       | 10/29/2002  | 12/28/2004 | 10/282478          | US | PROCESS AND SYSTEM FOR DEVELOPING DYNAMIC CIRCUIT GUIDELINES                                                                                    |
| 81996848     | Granted   | 6862694       | 10/5/2001   | 3/1/2005   | 09/972094          | US | System And Method For Setting And Executing Breakpoints                                                                                         |
| 81996854     | Granted   | 6616252       | 7/30/2001   | 9/9/2003   | 09/918669          | US | Permanently Attached Rackmount Handles And Spacing Brackets                                                                                     |
| 81996902     | Granted   | 7072960       | 6/10/2002   | 7/4/2006   | 10/164554          | US | GENERATING AUTOMATED MAPPINGS OF SERVICE DEMANDS TO SERVER CAPACITIES IN A DISTRIBUTED COMPUTER SYSTEM                                          |
| 81996914     | Granted   | 7349965       | 9/13/2002   | 3/25/2008  | 10/243342          | US | Automated Advertising And Matching Of Data Center Resource Capabilities                                                                         |
| 81996917     | Granted   | 7200589       | 10/3/2002   | 4/3/2007   | 10/264587          | US | Format-independent Advertising Of Data Center Resource Capabilities                                                                             |
| 81996920     | Granted   | 8255407       | 11/14/2002  | 8/28/2012  | 10/294221          | US | Matching Of Data Center Resource Capabilities And Resource Needs By Match-overlapping                                                           |
| 81996992     | Granted   | 6816920       | 3/20/2002   | 11/9/2004  | 10/100908          | US | Method And System For Managing Information For A Computer System                                                                                |
| 81997118     | Granted   | 6662865       | 4/30/2001   | 12/16/2003 | 09/843761          | US | Multi-Load Thermal Regulating System Having Electronic Valve Control                                                                            |
| 81997238     | Granted   | 7349340       | 6/18/2003   | 3/25/2008  | 10/464593          | US | System And Method Of Monitoring E-service Quality Of Service At A Transaction Level                                                             |
| 81997526     | Granted   | 7403911       | 7/10/2001   | 7/22/2008  | 09/902880          | US | METHOD AND SYSTEM FOR SETTING AN OPTIMAL PREFERENCE POLICY FOR AN AUCTION                                                                       |
| 81997529     | Granted   | 7249088       | 7/11/2001   | 7/24/2007  | 09/904311          | US | JOINT ESTIMATION OF BIDDERS' RISK ATTITUDES AND PRIVATE INFORMATION                                                                             |
| 81997538     | Published |               | 3/8/2010    |            | 12/719716          | US | Determining A Demand Function For An Item                                                                                                       |

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| 81997589     | Granted | 7225174       | 2/19/2002   | 5/29/2007  | 10/078971          | US | Investment Analysis Tool And Service For Making Investment Decisions                                                 |
| 81997592     | Granted | 6809937       | 11/16/2001  | 10/26/2004 | 09/990819          | US | Method And Apparatus For Shock And Vibration Isolation On A Circuit Component                                        |
| 81997667     | Granted | 6804233       | 11/14/2000  | 10/12/2004 | 09/712090          | US | Method And System For Link Level Server/Switch Trunking                                                              |
| 81997682     | Granted | 7313694       | 10/5/2001   | 12/25/2007 | 09/972385          | US | Secure File Access Control Via Directory Encryption                                                                  |
| 81997724     | Granted | 7243368       | 3/29/2002   | 7/10/2007  | 10/113255          | US | Access Control System And Method For A Networked Computer System                                                     |
| 81997727     | Granted | 7509405       | 1/30/2002   | 3/24/2009  | 10/060633          | US | Method And Apparatus For Inferring Topology Of A Network                                                             |
| 81998180     | Granted | 7020145       | 9/24/2001   | 3/28/2006  | 09/963338          | US | Network Topology Manager                                                                                             |
| 81998216     | Granted | 6904968       | 9/14/2001   | 6/14/2005  | 09/951730          | US | Method And Apparatus For Individually Cooling Components Of Electronic Systems                                       |
| 81998219     | Granted | 6876549       | 10/31/2003  | 4/5/2005   | 10/696999          | US | Method And Apparatus For Individually Cooling Components Of Electronic Systems                                       |
| 81998222     | Granted | 7086459       | 10/31/2003  | 8/8/2006   | 10/697940          | US | Method And Apparatus For Individually Cooling Components Of Electronic Systems                                       |
| 81998225     | Granted | 7013968       | 10/31/2003  | 3/21/2006  | 10/697971          | US | Method And Apparatus For Individually Cooling Components Of Electronic Systems                                       |
| 81998237     | Granted | 7907139       | 10/17/2001  | 3/15/2011  | 09/982481          | US | METHOD FOR PLACEMENT OF DATA FOR VISUALIZATION OF MULTIDIMENSIONAL DATA SETS USING MULTIPLE PIXEL BAR CHARTS         |
| 81998279     | Granted | 7002801       | 10/16/2003  | 2/21/2006  | 10/687382          | US | Method Of Cooling Semiconductor Die Using Microchannel Thermosyphon                                                  |
| 81998288     | Granted | 6828828       | 8/3/2001    | 12/7/2004  | 09/921471          | US | Dynamic Control Of Switching Reference Voltage                                                                       |
| 81998297     | Granted | 6574104       | 10/5/2001   | 6/3/2003   | 09/970707          | US | Smart Cooling Of Data Centers                                                                                        |
| 81998420     | Granted | 6658358       | 5/2/2002    | 37957      | 10/138875          | US | Method And System For Computing Forces On Data Objects For Physics-Based Visualization                               |
| 81998489     | Granted | 6826675       | 10/9/2001   | 11/30/2004 | 09/973156          | US | Stack Utilization Management System And Method For A Single-Stack Arrangement                                        |
| 81998492     | Granted | 6904513       | 7/2/2004    | 6/7/2005   | 10/884666          | US | Stack Utilization Management System And Method For A Single-Stack Arrangement                                        |
| 81999404     | Granted | 6892378       | 9/17/2001   | 5/10/2005  | 09/953276          | US | Method To Detect Unbounded Growth Of Linked Lists In A Running Application                                           |
| 81999524     | Granted | 6710264       | 11/16/2001  | 3/23/2004  | 09/994004          | US | METHOD AND APPARATUS FOR SUPPORTING A CIRCUIT COMPONENT HAVING SOLDER COLUMN INTERCONNECTS USING EXTERNAL SUPPORT    |
| 81999530     | Granted | 7434309       | 8/29/2003   | 10/14/2008 | 10/652598          | US | METHOD AND APPARATUS FOR SUPPORTING A CIRCUIT COMPONENT HAVING SOLDER COLUMN INTERCONNECTS USING AN EXTERNAL SUPPORT |

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| 81999533     | Granted | 8141068       | 6/18/2002   | 3/20/2012  | 10/175267 US       | US | Compiler With Flexible Scheduling                                                                                                    |
| 81999665     | Granted | 6966010       | 8/31/2001   | 11/15/2005 | 09/942911 US       | US | Application Container That Allows Concurrent Execution On Multiple Nodes In A Cluster                                                |
| 81999782     | Granted | 7403985       | 11/1/2001   | 7/22/2008  | 09/985081 US       | US | Method And System For Analyzing Electronic Service Execution                                                                         |
| 81999923     | Granted | 6978259       | 10/23/2001  | 12/20/2005 | 10/046463 US       | US | Automated System Adaptation Technique Particularly For Data Storage Systems                                                          |
| 81999926     | Granted | 7353184       | 3/7/2002    | 4/1/2008   | 10/091424 US       | US | Customer-side Market Segmentation                                                                                                    |
| 82000025     | Granted | 7506060       | 12/11/2001  | 3/17/2009  | 10/015015 US       | US | TECHNIQUE FOR REDUCING NETWORK BANDWIDTH FOR DELIVERY FO DYNAMIC AND MIXED CONTENT                                                   |
| 82000211     | Granted | 7415710       | 7/7/2003    | 8/19/2008  | 10/614396 US       | US | Method And System For Maintaining A Module Type Definition Table                                                                     |
| 82000466     | Granted | 6944732       | 5/8/2002    | 9/13/2005  | 10/141319 US       | US | MEHTHOD AND APPARATUS FOR SUPPORTING SNAPSHOTS WITH DIRECT I/O IN A STORAGE AREA NETWORK                                             |
| 82000553     | Granted | 6508750       | 8/9/2001    | 1/21/2003  | 09/925901 US       | US | Grooved Tape Guide                                                                                                                   |
| 82000721     | Granted | 6640283       | 1/16/2002   | 10/28/2003 | 10/050736 US       | US | Apparatus For Cache Compression Engine For Data Compression Of On-Chip Caches To Increase Effective Cache Size                       |
| 82000802     | Granted | 6804741       | 1/16/2002   | 10/12/2004 | 10/050722 US       | US | Coherent Memory Mapping Tables For Host I/O Bridge                                                                                   |
| 82000838     | Granted | 7398374       | 2/27/2002   | 7/8/2008   | 10/083872 US       | US | MULTI-CLUSTER PROCESSOR FOR PROCESSING INSTRUCTIONS OF ONE OR MORE INSTRUCTION THREADS                                               |
| 82000850     | Granted | 6941489       | 2/27/2002   | 9/6/2005   | 10/084533 US       | US | Checkpointing Of Register File                                                                                                       |
| 82000862     | Granted | 6832300       | 3/20/2002   | 12/14/2004 | 10/103204 US       | US | Methods And Apparatus For Control Of Asynchronous Cache                                                                              |
| 82000919     | Granted | 6820167       | 5/16/2002   | 11/16/2004 | 10/147193 US       | US | Configurable Crossbar And Related Methods                                                                                            |
| 82000964     | Granted | 6871264       | 3/6/2002    | 3/22/2005  | 10/092645 US       | US | System And Method For Dynamic Processor Core And Cache Partitioning On Large-Scale Multithreaded, Multiprocessor Integrated Circuits |
| 82001030     | Granted | 7058702       | 1/4/2002    | 6/6/2006   | 10/038205 US       | US | Efficient Validation Of Network Configuration Change Commands                                                                        |
| 82001033     | Granted | 6842836       | 11/7/2001   | 1/11/2005  | 10/005575 US       | US | Streaming Media Cache Filling                                                                                                        |
| 82001039     | Granted | 6810516       | 10/30/2001  | 10/26/2004 | 09/984361 US       | US | Mechanism Allowing Separation Of Graphical Display Of Object Status From Underlying Data                                             |
| 82001042     | Granted | 6951012       | 10/2/2001   | 9/27/2005  | 09/968552 US       | US | API To Increase Debug Log Performance                                                                                                |
| 82001048     | Granted | 6938259       | 10/2/2001   | 8/30/2005  | 09/968553 US       | US | API To Enforce Internationalization                                                                                                  |
| 82001051     | Granted | 6795832       | 10/9/2001   | 9/21/2004  | 09/971581 US       | US | Rule Based Compatibility Module                                                                                                      |
| 82001216     | Granted | 7290117       | 12/20/2001  | 10/30/2007 | 10/032109 US       | US | Memory Having Increased Data-transfer Speed And Related Systems And Methods                                                          |

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| 82001297     | Granted | 6895533       | 3/21/2002   | 5/17/2005  | 10/104524          | US | METHOD AND SYSTEM FOR ASSESSING AVAILABILITY OF COMPLEX ELECTRONIC SYSTEMS, INCLUDING COMPUTER SYSTEMS                     |
| 82001405     | Granted | 6774458       | 7/23/2002   | 8/10/2004  | 10/202105          | US | Vertical Interconnection Structure And Methods                                                                             |
| 82001408     | Granted | 6893951       | 5/18/2004   | 5/17/2005  | 10/848759          | US | Vertical Interconnection Structure And Methods                                                                             |
| 82001486     | Granted | 6903941       | 10/24/2002  | 6/7/2005   | 10/279586          | US | Printed Circuit Board Assembly Employing A Press Fit Electrical Connector                                                  |
| 82001612     | Granted | 7437734       | 8/12/2003   | 10/14/2008 | 10/640625          | US | Propagating Web Transaction Context Into Common Object Model (COM) Business Logic Components                               |
| 82001777     | Granted | 7191322       | 10/12/2001  | 3/13/2007  | 09/977126          | US | Method And Apparatus For Tuning Multiple Instances Of Kernel Modules                                                       |
| 82001861     | Granted | 6855647       | 4/2/2003    | 2/15/2005  | 10/405294          | US | Custom Electrodes For Molecular Memory And Logic Devices                                                                   |
| 82001903     | Granted | 7836503       | 10/31/2001  | 11/16/2010 | 10/003820          | US | Node, Method And Computer Readable Medium For Optimizing Performance Of Signature Rule Matching In A Network               |
| 82002023     | Granted | 6857047       | 6/10/2002   | 2/15/2005  | 10/167358          | US | Memory Compression For Computer Systems                                                                                    |
| 82002098     | Granted | 6873543       | 5/30/2003   | 3/29/2005  | 10/448574          | US | Memory Device                                                                                                              |
| 82002155     | Granted | 7200747       | 10/31/2001  | 4/3/2007   | 09/984926          | US | System For Ensuring Data Privacy And User Differentiation In A Distributed File System                                     |
| 82002167     | Granted | 7203317       | 10/31/2001  | 4/10/2007  | 09/984927          | US | System For Enabling Lazy-revocation Through Recursive Key Generation                                                       |
| 82002176     | Granted | 6848841       | 9/9/2002    | 2/1/2005   | 10/237475          | US | Optical Component Connector                                                                                                |
| 82002293     | Granted | 6810465       | 10/31/2001  | 10/26/2004 | 10/004193          | US | Limiting The Number Of Dirty Entries In A Computer Cache                                                                   |
| 82002296     | Granted | 7096320       | 10/31/2001  | 8/22/2006  | 10/004195          | US | Computer Performance Improvement By Adjusting A Time Used For Preemptive Eviction Of Cache Entries                         |
| 82002353     | Granted | 7272712       | 11/28/2006  | 9/18/2007  | 11/605102          | US | Data Structure And Method For Managing Modules Associated With A Kernel                                                    |
| 82002422     | Granted | 7774225       | 9/12/2001   | 8/10/2010  | 09/953663          | US | Graphical User Interface For Capacity-driven Production Planning Tool                                                      |
| 82002467     | Granted | 6772633       | 12/11/2002  | 8/10/2004  | 10/316711          | US | Acoustics-Based Diagnostics                                                                                                |
| 82002905     | Granted | 6909577       | 6/7/2002    | 6/21/2005  | 10/165820          | US | Low-overhead Storage Magazine                                                                                              |
| 82002914     | Granted | 6883109       | 7/30/2001   | 4/19/2005  | 09/918030          | US | METHOD FOR ACCESSING SCAN CHAINS AND UPDATING EEPROM-RESIDENT FPGA CODE THROUGH A SYSTEM MANAGEMENT PROCESSOR AND JTAG BUS |
| 82003022     | Granted | 6924979       | 7/30/2001   | 8/2/2005   | 09/919189          | US | Mounting Apparatus For Coupling Control Circuitry To An Air Moving Device                                                  |
| 82003292     | Granted | 8041796       | 5/2/2002    | 10/18/2011 | 10/136483          | US | Process Duration Control                                                                                                   |
| 82003523     | Granted | 7372714       | 7/26/2006   | 5/13/2008  | 11/494397          | US | Methods And Memory Structures Using Tunnel-junction Device As Control Element                                              |

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| 82003964     | Granted | 6781858       | 8/29/2003   | 8/24/2004  | 10/650895          | US | Cubic Memory Array                                                                                                                                                                                 |
| 82004231     | Granted | D475021       | 7/23/2001   | 5/27/2003  | 29/145447          | US | Electrical Contact                                                                                                                                                                                 |
| 82004360     | Granted | 6718277       | 4/17/2002   | 4/6/2004   | 10/123403          | US | Atmospheric Control Within A Building                                                                                                                                                              |
| 82004525     | Granted | 7340749       | 12/3/2002   | 3/4/2008   | 10/308524          | US | Method And Apparatus To Detect Presence Of Or A Size Of A Data Cartridge                                                                                                                           |
| 82004543     | Granted | 7133145       | 2/5/2003    | 11/7/2006  | 10/358838          | US | Method And Assembly For Carriage Locking                                                                                                                                                           |
| 82004594     | Granted | 6895491       | 9/26/2002   | 5/17/2005  | 10/260645          | US | Memory Addressing For A Virtual Machine Implementation On A Computer Processor Supporting Virtual Hash-Page Table Searching                                                                        |
| 82004849     | Granted | 7428695       | 10/22/2001  | 9/23/2008  | 09/986221          | US | System For Automatic Generation Of Arbitrarily Indexed Hyperlinked Text                                                                                                                            |
| 82004861     | Granted | 6615993       | 4/3/2002    | 9/9/2003   | 10/116419          | US | Slide Interlock Assembly For A Rack                                                                                                                                                                |
| 82005032     | Granted | 8015054       | 3/5/2003    | 9/6/2011   | 10/382449          | US | Method And System For Generating Recommendations                                                                                                                                                   |
| 82005527     | Granted | 7305547       | 6/28/2002   | 12/4/2007  | 10/186901          | US | Method For Upgrading A Host/agent Security System That Includes Digital Certificate Management And An Upgradable Backward Compatible Host/agent Security System Digital Certificate Infrastructure |
| 82005539     | Granted | 6702124       | 12/6/2001   | 3/9/2004   | 10/003107          | US | Flat Spring Clip For Tool-Less Slide Installation                                                                                                                                                  |
| 82005542     | Granted | 6659577       | 12/6/2001   | 12/9/2003  | 10/003278          | US | Dual Flat Springs For Tool-less Slide Installation                                                                                                                                                 |
| 82005545     | Granted | 6830300       | 9/3/2003    | 12/14/2004 | 10/653761          | US | Dual Flat Springs For Tool-Less Slide Installation                                                                                                                                                 |
| 82005548     | Granted | 7992950       | 10/19/2004  | 8/9/2011   | 10/968510          | US | Method For Installing A Slide Assembly For A Computer Server Using Dual Flat Springs (as Amended For -3 CON)                                                                                       |
| 82005767     | Granted | 6842369       | 5/7/2002    | 1/11/2005  | 10/141609          | US | INTERMESH MEMORY DEVICE                                                                                                                                                                            |
| 82006031     | Granted | D471205       | 7/31/2001   | 3/4/2003   | 29/145973          | US | Portion Of A Computer Display With A Computer ICON Graphic (As Amended)                                                                                                                            |
| 82006034     | Granted | D468750       | 7/31/2001   | 1/14/2003  | 29/145972          | US | Portion Of A Computer Display With A Computer Icon Graphic (As Amended)                                                                                                                            |
| 82006037     | Granted | 6600661       | 4/8/2002    | 7/29/2003  | 10/118418          | US | Method And Apparatus For Supporting A Circuit Component WRAP- AROUND COOLING ARRANGEMENT FOR PRINTED CIRCUIT BOARD                                                                                 |
| 82006229     | Granted | 6882536       | 4/25/2002   | 4/19/2005  | 10/131476          | US | Reliability For Interconnect Fabrics                                                                                                                                                               |
| 82006274     | Granted | 7233983       | 1/17/2002   | 6/19/2007  | 10/052682          | US | Method And Apparatus For Separating Data Packets In A Memory Buffer                                                                                                                                |
| 82006472     | Granted | 7333498       | 5/15/2002   | 2/19/2008  | 10/147004          | US | Network Service System And Mechanism For Searching Service Registries                                                                                                                              |
| 82006544     | Granted | 8495211       | 9/26/2002   | 7/23/2013  | 10/255818          | US | Daisy-chained Device-mirroring Architecture                                                                                                                                                        |
| 82006580     | Granted | 7165141       | 2/27/2004   | 1/16/2007  | 10/787161          | US | Data Synchronization For Two Data Mirrors With Sidelfiles (as Amended)                                                                                                                             |
| 82006583     | Granted | 8200921       | 3/12/2004   | 6/12/2012  | 10/798962          | US | Methods And System For Browsing Large Text Files                                                                                                                                                   |
| 82006601     | Granted | 6789083       | 9/17/2001   | 9/7/2004   | 09/954093          | US |                                                                                                                                                                                                    |

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| 82006835     | Granted | 7080245       | 5/23/2002   | 7/18/2006  | 10/155345          | US | Method And System Of Switching Between Two Or More Images Of Firmware On A Host Device           |
| 82006910     | Granted | 7256435       | 6/2/2003    | 8/14/2007  | 10/453329          | US | Multilevel Imprint Lithography                                                                   |
| 82006970     | Granted | 6832270       | 3/8/2002    | 12/14/2004 | 10/092603          | US | Virtualization Of Computer System Interconnects                                                  |
| 82006982     | Granted | 7047475       | 2/4/2003    | 5/16/2006  | 10/357975          | US | CRC Encoding Scheme For Conveying Status Information                                             |
| 82007021     | Granted | 6677778       | 5/23/2002   | 1/13/2004  | 10/154329          | US | Device And Method To Cause A False Data Value To Be Correctly Seen As The Proper Data Value      |
| 82007039     | Granted | 6845474       | 9/10/2001   | 1/18/2005  | 09/948757          | US | Problem Detector And Method                                                                      |
| 82007042     | Granted | 6625018       | 6/26/2002   | 9/23/2003  | 10/183151          | US | Fluid-Flow Balancer, Electronic System And Related Methods                                       |
| 82007168     | Granted | 6615992       | 3/11/2002   | 9/9/2003   | 10/094860          | US | Adjustable Rackmount Assembly                                                                    |
| 82007204     | Granted | 7296069       | 5/8/2002    | 11/13/2007 | 10/140214          | US | Method And System For Network Fault Monitoring With Linux                                        |
| 82007219     | Granted | 7373399       | 5/9/2002    | 5/13/2008  | 10/140933          | US | System And Method For An Enterprise-to-enterprise Compare Within A Utility Data Center (UDC)     |
| 82007222     | Granted | 7933983       | 12/17/2002  | 4/26/2011  | 10/320461          | US | Method And System For Performing Load Balancing Across Control Planes In A Data Center           |
| 82007393     | Granted | 7451073       | 6/25/2002   | 11/11/2008 | 10/178967          | US | System And Method For Increasing Performance In Multi-cpu Simulation                             |
| 82007396     | Granted | 6648149       | 2/28/2002   | 11/18/2003 | 10/085746          | US | Rack Latch Assembly                                                                              |
| 82008077     | Granted | 5875121       | 8/6/1996    | 2/23/1999  | 08/692732          | US | Register Selection System And Method                                                             |
| 82008143     | Granted | 5721697       | 5/17/1996   | 2/24/1998  | 08/649349          | US | Performing Tree Additions Via Multiplication                                                     |
| 82008215     | Granted | 5761505       | 11/17/1995  | 6/2/1998   | 08/559977          | US | System And Method For Automatically And Reliably Managing Global Resources In A Computer Network |
| 82008218     | Granted | 5930503       | 12/29/1995  | 7/27/1999  | 08/580673          | US | System And Method For On Demand Registration Of Tasks                                            |
| 82008602     | Granted | D460968       | 7/24/1998   | 7/30/2002  | 29/091208          | US | Control Module For A Computer Peripheral (as Amended)                                            |
| 82009409     | Granted | 5798952       | 2/29/1996   | 8/25/1998  | 08/608798          | US | Leading Bit Anticipator                                                                          |
| 82009415     | Granted | 5691652       | 2/20/1996   | 11/25/1997 | 08/603977          | US | Completion Detection As A Means For Improving Alpha Soft-Error Resistance                        |
| 82009703     | Granted | 5723894       | 7/3/1996    | 3/3/1998   | 08/675768          | US | Structure For Providing An Electrical Connection Between Circuit Members                         |
| 82010459     | Granted | 5870387       | 12/31/1996  | 2/9/1999   | 08/775676          | US | METHOD AND APPARATUS FOR INITIALIZING A RING                                                     |
| 82011452     | Granted | 5761409       | 10/31/1995  | 6/2/1998   | 08/558574          | US | Passive Bus Monitor Detects Data Corruption For Block-Oriented Data Storage                      |
| 82011665     | Granted | 5751941       | 4/4/1996    | 5/12/1998  | 08/627629          | US | Object Oriented Framework For Testing Software                                                   |
| 82011887     | Granted | 5815707       | 10/19/1995  | 9/29/1998  | 08/545561          | US | Dynamic Function Replacement For STREAMS Framework                                               |
| 82012136     | Granted | 6109343       | 2/3/2000    | 8/29/2000  | 09/497556          | US | Low EMI Emissions Heat Sink Device                                                               |
| 82012139     | Granted | 6167949       | 2/3/2000    | 1/2/2001   | 09/497555          | US | Low EMI Emissions Heat Sink Device                                                               |
| 82012340     | Granted | 6098112       | 1/31/1996   | 8/1/2000   | 08/593313          | US | STREAMS Function Registering                                                                     |

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| 82012907     | Granted | 5758131       | 9/11/1996   | 5/26/1998  | 08/712001          | US | Bus Adapter For Synchronizing Communications Between Two Circuits Running At Different Clock Rates                  |
| 82013462     | Granted | 5948055       | 8/29/1996   | 9/7/1999   | 08/705358          | US | Distributed Internet Monitoring System And Method                                                                   |
| 82013465     | Granted | 5706323       | 3/1/1996    | 1/6/1998   | 08/609305          | US | DYNAMIC 1-OF-2N LOGIC ENCODING                                                                                      |
| 82013471     | Granted | 5740181       | 6/12/1996   | 4/14/1998  | 08/662403          | US | Method And Apparatus For At Speed Observability Of Pipelined Circuits                                               |
| 82013474     | Granted | 5719803       | 5/31/1996   | 2/17/1998  | 08/658925          | US | High Speed Addition Using Ling's Equations And Dynamil CMOS Logic                                                   |
| 82013510     | Granted | 5677863       | 4/4/1996    | 10/14/1997 | 08/627615          | US | Method Of Performing Operand Increment In A Booth Recoded Multiply Array                                            |
| 82013519     | Granted | 5854928       | 10/10/1996  | 12/29/1998 | 08/726760          | US | USE OF RUN-TIME CODE GENERATION TO CREATE SPECULATION RECOVERY CODE IN A COMPUTER SYSTEM                            |
| 82013594     | Granted | 5946716       | 5/30/1996   | 8/31/1999  | 08/656938          | US | Sectored Virtual Memory Management System And Translation Look-aside Buffer (TLB) For The Same                      |
| 82014092     | Granted | 5692026       | 5/31/1996   | 11/25/1997 | 08/657732          | US | Apparatus For Reducing Capacitive Loading Of Clock And Shift Signals By Shift Register-Based Devices                |
| 82014095     | Granted | 5805851       | 6/13/1996   | 9/8/1998   | 08/662577          | US | SYSTEM FOR DETERMINING DATA DEPENDENCIES AMONG INTRA-BUNDLE INSTRUCTIONS QUEUED AND PRIOR INSTRUCTIONS IN THE QUEUE |
| 82014098     | Granted | 5784587       | 6/13/1996   | 7/21/1998  | 08/663337          | US | Method And System For Recovering From Cache Misses                                                                  |
| 82014449     | Granted | 6260048       | 10/27/1998  | 7/10/2001  | 09/181136          | US | Resolution Of Incidents Which Occur During The Use Of A Product                                                     |
| 82014524     | Granted | 5907711       | 1/22/1996   | 5/25/1999  | 08/589213          | US | Method And Apparatus For Transforming Multiplications Into Product Table Lookup References                          |
| 82014581     | Granted | 5838944       | 7/31/1996   | 11/17/1998 | 08/693825          | US | SYSTEM FOR STORING PROCESSOR REGISTER DATA AFTER A MISPREDICTED BRANCH                                              |
| 82014584     | Granted | 5740391       | 3/1/1996    | 4/14/1998  | 08/609207          | US | PREVENTING PREMATURE EARLY EXCEPTION SIGNALING WITH SPECIAL INSTRUCTION ENCODING                                    |
| 82014599     | Granted | 5781923       | 5/28/1996   | 7/14/1998  | 08/654469          | US | ADDING A FIELD TO THE CACHE TAG IN A COMPUTER SYSTEM TO INDICATE BYTE ORDERING                                      |
| 82015019     | Granted | 5764990       | 3/18/1996   | 6/9/1998   | 08/618276          | US | Compact Encoding For Storing Integer Multiplication Sequences                                                       |
| 82015094     | Granted | 5758178       | 3/1/1996    | 5/26/1998  | 08/609338          | US | Miss Tracking System And Method                                                                                     |
| 82015133     | Granted | 5799167       | 5/15/1996   | 8/25/1998  | 08/648600          | US | Instruction Nullification System And Method For A Processor That Executes Instructions Out Of Order                 |
| 82015136     | Granted | 5796975       | 5/24/1996   | 8/18/1998  | 08/653573          | US | Operand Dependency Tracking System And Method For A Processor That Executes Instructions Out Of Order               |
| 82015145     | Granted | 5828866       | 7/8/1996    | 10/27/1998 | 08/676762          | US | REAL-TIME SYNCHRONIZATION OF CONCURRENT VIEWS AMONG A PLURALITY OF EXISTING APPLICATIONS                            |
| 82015208     | Granted | 5747889       | 7/31/1996   | 5/5/1998   | 08/688912          | US | REDUNDANT POWER SUPPLY AND STORAGE SYSTEM                                                                           |

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| 82015274     | Granted | 5946190       | 8/29/1997   | 8/31/1999  | 08/920515 US       | US | Ducted High Aspect Ratio HeatSink Assembly                                                                  |
| 82015412     | Granted | 5654703       | 6/17/1996   | 8/5/1997   | 08/664901 US       | US | Parallel Data Compression And Decompression                                                                 |
| 82015463     | Granted | 5828324       | 6/17/1996   | 10/27/1998 | 08/664902 US       | US | Match And Match Address Signal Generation In A Conte                                                        |
| 82015511     | Granted | 5930062       | 10/3/1996   | 7/27/1999  | 08/725795 US       | US | Addressable Memory Encoder                                                                                  |
| 82015955     | Granted | 5901318       | 5/6/1996    | 5/4/1999   | 08/643670 US       | US | Actively Stabilized Magnetoiresistive Head                                                                  |
| 82016006     | Granted | 5818850       | 12/20/1996  | 10/6/1998  | 08/773714 US       | US | Method And System For Optimizing Code                                                                       |
| 82016144     | Granted | 5835777       | 3/20/1996   | 11/10/1998 | 08/619876 US       | US | Speed Coverage Tool And Method                                                                              |
| 82016393     | Granted | 5745419       | 7/30/1996   | 4/28/1998  | 08/690631 US       | US | Method Of Automatically Generating A Software Installation Package                                          |
| 82016396     | Granted | 5896332       | 12/24/1997  | 4/20/1999  | 08/998420 US       | US | Method And Apparatus For Measuring The Offset Voltages Of SRAM Sense Amplifiers                             |
| 82016639     | Granted | 5802333       | 1/22/1997   | 9/1/1998   | 08/785940 US       | US | Method And Apparatus For Measuring The Offset Voltages Of SRAM Sense Amplifiers                             |
| 82017005     | Granted | 5864692       | 12/16/1996  | 1/26/1999  | 08/767449 US       | US | Network Inter-Product Stacking Mechanism In Which Stacked Products Appear To The Network As A Single Device |
| 82017140     | Granted | 5790626       | 9/10/1996   | 8/4/1998   | 08/711775 US       | US | Method And Apparatus For Protecting Memory-mapped Devices From Side Effects Of Speculative Instructions     |
| 82017143     | Granted | 5734833       | 3/12/1996   | 3/31/1998  | 08/614987 US       | US | Bi-Directional Linear Feedback Shift Register                                                               |
| 82017158     | Granted | 5806061       | 5/20/1997   | 9/8/1998   | 08/859556 US       | US | A SHARED COMMUNICATIONS CHANNEL WITH ENHANCED RESERVATION AND COLLISIO N RESOLUTION PROTOCOLS               |
| 82017338     | Granted | 5802565       | 8/29/1996   | 9/1/1998   | 08/705443 US       | US | ALLOWS ANY SUBSET OF STATIONS TO TRANSMIT DATA AFTER COLLISION OCCURED IN CONTENTION SLOT                   |
| 82017341     | Granted | 5854943       | 8/7/1996    | 12/29/1998 | 08/689173 US       | US | Method For Cost-based Optimization Over Multimedia Repositories                                             |
| 82017344     | Granted | 5765194       | 5/1/1996    | 6/9/1998   | 08/641655 US       | US | Speed Optimal Bit Ordering In A Cache Memory                                                                |
| 82017401     | Granted | 5854934       | 8/23/1996   | 12/29/1998 | 08/702359 US       | US | Speed Efficient Cache Output Selector Circuitry Based On Tag Compare And Data Organization                  |
| 82017818     | Granted | 5999738       | 11/6/1997   | 12/7/1999  | 08/964050 US       | US | TIMING CONSISTENT DYNAMIC COMPARE WITH FORCE MISS CIRCUIT                                                   |
| 82017905     | Granted | 5860097       | 9/23/1996   | 1/12/1999  | 08/717786 US       | US | Optimizing Compiler Having Data Cache Prefetch Spreading                                                    |
| 82018217     | Granted | 6189046       | 3/27/1997   | 2/13/2001  | 08/828027 US       | US | Flexible Scheduling Of Non-Speculative Instructions                                                         |
| 82018280     | Granted | 6070198       | 10/16/1996  | 5/30/2000  | 08/732176 US       | US | Associative Cache Memory With Improved Hit Time                                                             |
| 82018520     | Granted | 6742014       | 9/27/2002   | 5/25/2004  | 10/259015 US       | US | Mechanism And Method For Merging Cached Location Information In A Distributed Object Environment            |
| 82019633     | Granted | 5880671       | 10/31/1996  | 3/9/1999   | 08/742193 US       | US | ENCRYPION WITH A STREAMS-BASED PROTOCOL STACK                                                               |
|              |         |               |             |            |                    |    | Conditional Carry Encoding For Carry Select Adder                                                           |
|              |         |               |             |            |                    |    | Flexible Circuitry And Method For Detecting Signal Patterns On A Bus                                        |

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| 82019636     | Granted | 5887003       | 9/10/1996   | 3/23/1999  | 08/709798          | US | Apparatus And Method For Comparing A Group Of Binary Fields With An Expected Pattern To Generate Match Results      |
| 82019696     | Granted | 6308206       | 9/17/1997   | 10/23/2001 | 08/932733          | US | Internet Enabled Computer System Management                                                                         |
| 82019705     | Granted | 6779029       | 8/21/2001   | 8/17/2004  | 09/934398          | US | Internet Enabled Computer System Management                                                                         |
| 82019708     | Granted | 8301587       | 7/1/2004    | 10/30/2012 | 10/882721          | US | Internet Enabled Computer System Management                                                                         |
| 82019882     | Granted | 5845071       | 9/27/1996   | 12/1/1998  | 08/720368          | US | Error Containment Cluster Of Nodes                                                                                  |
| 82019891     | Granted | 6122708       | 8/15/1997   | 9/19/2000  | 08/911709          | US | Data Cache For Use With Streaming Data                                                                              |
| 82020026     | Granted | 6612023       | 9/6/1996    | 9/2/2003   | 08/709354          | US | Method For Registering A Component Lead With A U-Shaped Metalized Pad                                               |
| 82020029     | Granted | 6867504       | 7/7/2003    | 3/15/2005  | 10/615533          | US | Method And Apparatus For Printed Circuit Board Pads With Registering Feature For Component Leads                    |
| 82020083     | Granted | 5961655       | 12/5/1996   | 10/5/1999  | 08/759583          | US | Opportunistic Use Of Pre-Corrected Data To Improve Processor Performance                                            |
| 82020086     | Granted | 5870573       | 10/18/1996  | 2/9/1999   | 08/733483          | US | Transistor Switch Used To Isolate Bus Devices And/Or Translate Bus Voltage Levels                                   |
| 82020944     | Granted | 5857105       | 2/5/1997    | 1/5/1999   | 08/796095          | US | Compiler For Reducing Number Of Indirect Calls In An Executable Code                                                |
| 82020956     | Granted | 6151326       | 10/24/1996  | 11/21/2000 | 08/738960          | US | Method And Apparatus For Automatic Device Segmentation And Port-To-Segment Distribution                             |
| 82021577     | Granted | 5857104       | 11/26/1996  | 1/5/1999   | 08/757038          | US | Synthetic Dynamic Branch Prediction                                                                                 |
| 82021946     | Granted | 5805520       | 4/25/1997   | 9/8/1998   | 08/842973          | US | Integrated Circuit Address Reconfigurability                                                                        |
| 82022135     | Granted | 5898827       | 9/27/1996   | 4/27/1999  | 08/720331          | US | Routing Methods For A Multinode SCI Computer System                                                                 |
| 82022147     | Granted | 5708400       | 10/30/1996  | 1/13/1998  | 08/739532          | US | AC Coupled Termination Of A Printed Circuit Board Power Plane In Its Characteristic Impedance                       |
| 82022465     | Granted | 5937195       | 11/27/1996  | 8/10/1999  | 08/756600          | US | Global Control Flow Treatment Of Predicated Code                                                                    |
| 82022579     | Granted | 5953237       | 11/25/1996  | 9/14/1999  | 08/753453          | US | Power Balancing To Reduce Step Load                                                                                 |
| 82022582     | Granted | 5870545       | 4/4/1997    | 2/9/1999   | 08/825853          | US | System And Method For Performing Flexible Workflow Process Compensation In A Distributed Workflow Management System |
| 82022591     | Granted | 5826239       | 12/17/1996  | 10/20/1998 | 08/768261          | US | Distributed Workflow Resource Management System And Method                                                          |
| 82022645     | Granted | 6151705       | 10/30/1997  | 11/21/2000 | 08/960848          | US | Efficient Use Of The Base Register Auto-Increment Feature Of Memory Access Instructions                             |
| 82022834     | Granted | 5894142       | 12/11/1996  | 4/13/1999  | 08/763501          | US | Routing For Integrated Circuits                                                                                     |
| 82022900     | Granted | 5917484       | 2/24/1997   | 6/29/1999  | 08/804760          | US | Multilingual System Locale Configuration                                                                            |
| 82023023     | Granted | 6108745       | 10/31/1997  | 8/22/2000  | 08/962490          | US | Fast And Compact Address Bit Routing Scheme That Supports Various DRAM Bank Sizes And Multiple Interleaving Schemes |

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| 82023689     | Granted | 6073223       | 7/21/1997   | 6/6/2000   | 08/897444          | US | MEMORY CONTROLLER AND METHOD FOR INTERMITTENTLY ACTIVATING AND IDLING A CLOCK SIGNAL FOR A SYNCHRONOUS MEMORY                                                                    |
| 82023839     | Granted | 5924103       | 3/12/1997   | 7/13/1999  | 08/815229          | US | Works-in-progress In An Information Management System                                                                                                                            |
| 82024079     | Granted | 5951695       | 7/25/1997   | 9/14/1999  | 08/900945          | US | Fast Database Failover                                                                                                                                                           |
| 82024082     | Granted | 6091698       | 7/17/1997   | 7/18/2000  | 08/896004          | US | OVERWRITING PHASE CHANGE MEDIA BY VARYING DATA PATTERNS                                                                                                                          |
| 82024262     | Granted | 5903891       | 2/25/1997   | 5/11/1999  | 08/804990          | US | HIERARCHIAL INFORMATION PROCESSES THAT SHARE INTERMEDIATE DATA AND FORMULATE CONTRACT DATA                                                                                       |
| 82024265     | Granted | 5878206       | 3/25/1997   | 3/2/1999   | 08/823704          | US | Commit Scope Control In Hierarchical Information Processes                                                                                                                       |
| 82024379     | Granted | 6032148       | 9/15/1997   | 2/29/2000  | 08/929043          | US | Multilevel Storage System With Hybrid Data Compression                                                                                                                           |
| 82024382     | Granted | 6070187       | 3/26/1998   | 5/30/2000  | 09/048934          | US | METHOD AND APPARATUS FOR CONFIGURING A NETWORK NODE TO BE ITS OWN GATEWAY                                                                                                        |
| 82024877     | Granted | 6188633       | 4/28/1998   | 2/13/2001  | 09/067702          | US | MULTI-PORT COMPUTER REGISTER FILE HAVING SHARED WORD LINES FOR READ AND WRITE PORTS AND STORAGE ELEMENTS THAT POWER DOWN OR ENTER A HIGH-IMPEDANCE STATE DURING WRITE OPERATIONS |
| 82024997     | Granted | 6115545       | 7/9/1997    | 9/5/2000   | 08/891624          | US | Automatic Internet Protocol (IP) Address Allocation And Assignment                                                                                                               |
| 82025075     | Granted | 5832254       | 9/15/1997   | 11/3/1998  | 08/929416          | US | Scalable Resynchronization Of Remote Counters                                                                                                                                    |
| 82025195     | Granted | 6871810       | 7/14/1999   | 3/29/2005  | 09/353173          | US | Packing Of A Magnetic Tape To Improve Pack Stability Prior To Removal From A Tape Drive                                                                                          |
| 82025378     | Granted | 6055604       | 8/26/1997   | 4/25/2000  | 08/920120          | US | FORCED TRANSACTION LOG POSTING USING A LEAST BUSY STORAGE MEDIA WITHOUT MAINTAINING REDUNDANCY OF THE TRANSACTION LOG                                                            |
| 82025393     | Granted | 5960451       | 9/16/1997   | 9/28/1999  | 08/932812          | US | System And Method For Reporting Available Capacity In A Data Storage System With Variable Consumption Characteristics                                                            |
| 82025498     | Granted | 6216140       | 9/17/1997   | 4/10/2001  | 08/931980          | US | METHODOLOGY FOR THE EFFICIENT MANAGEMENT OF HIERARCHICALLY ORGANIZED INFORMATION                                                                                                 |
| 82025630     | Granted | 6847367       | 7/23/1998   | 1/25/2005  | 09/121745          | US | Display For Port Area Of Electronic Equipment                                                                                                                                    |
| 82025834     | Granted | 6175509       | 5/14/1997   | 1/16/2001  | 08/856312          | US | SPACE EFFICIENT LOCAL REGULATOR FOR A MICROPROCESSOR                                                                                                                             |
| 82025873     | Granted | 5982711       | 6/5/1997    | 11/9/1999  | 08/869649          | US | A Device For Reading Data From Or Writing Data To Magnetic Storage Media And A Method Of Positioning A Tape Head Relative To The Magnetic Storage Media                          |
| 82025951     | Granted | 5803389       | 8/27/1997   | 9/8/1998   | 08/919691          | US | Take-up Reel For Magnetic Tape Data Systems                                                                                                                                      |
| 82026062     | Granted | 5838550       | 8/28/1997   | 11/17/1998 | 08/919461          | US | Grounding Clip For Shielded Modular Connector                                                                                                                                    |

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| 82027016     | Granted | 6222698       | 5/22/1998   | 4/24/2001  | 09/083854          | US | Magnetic Tape Dimensional Instability Compensation By Varying Recording Head Azimuth Angle                                           |
| 82027388     | Granted | 6029225       | 12/16/1997  | 2/22/2000  | 08/991196          | US | Cache Bank Conflict Avoidance And Cache Collision Avoidance                                                                          |
| 82027637     | Granted | 6084178       | 2/27/1998   | 7/4/2000   | 09/032359          | US | Perimeter Clamp For Mounting And Aligning A Semiconductor Component As Part Of A Field Replaceable Unit (FRU)                        |
| 82027640     | Granted | 6164543       | 4/13/1999   | 12/26/2000 | 09/290428          | US | Method Of Deciphering Bar Codes                                                                                                      |
| 82027691     | Granted | 5983316       | 5/29/1997   | 11/9/1999  | 08/864805          | US | COMPUTING SYSTEM HAVING A SYSTEM MODE THAT UTILIZES BOTH A LOGICAL VOLUME MANAGER AND A RESOURCE MONITOR FOR MANAGING A STORAGE POOL |
| 82028249     | Granted | 6028733       | 5/9/1997    | 2/22/2000  | 08/853625          | US | DATA CARTRIDGE CADDY-TO-STORAGE RACK INTERLOCK AND RELEASE SYSTEM                                                                    |
| 82028264     | Granted | 6169640       | 3/4/1998    | 1/2/2001   | 09/034972          | US | Servo Band Identification In Linear Tape Systems Having Timing-based Servo Formats                                                   |
| 82028387     | Granted | 6141763       | 9/1/1998    | 10/31/2000 | 09/144965          | US | SELF-POWERED NETWORK ACCESS POINT                                                                                                    |
| 82028495     | Granted | 5944806       | 9/26/1997   | 8/31/1999  | 08/938866          | US | Microprocessor With Versatile Addressing                                                                                             |
| 82028633     | Granted | 5935251       | 12/22/1997  | 8/10/1999  | 08/995598          | US | METHOD AND APPARATUS EXPEDITED LOG-ON TO AN APPLICATION PROGRAM                                                                      |
| 82028825     | Granted | 6078982       | 3/24/1998   | 6/20/2000  | 09/047248          | US | PRE-LOCKING SCHEME FOR ALLOWING CONSISTENT AND CONCURRENT WORKFLOW PROCESS EXECUTION IN A WORKFLOW MANAGEMENT SYSTEM                 |
| 82029128     | Granted | 6198627       | 12/17/1998  | 3/6/2001   | 09/215047          | US | Noise Reduction Back Cover For Computer Devices                                                                                      |
| 82029182     | Granted | 6115809       | 4/30/1998   | 9/5/2000   | 09/070442          | US | COMPILING STRONG AND WEAK BRANCHING BEHAVIOR INSTRUCTION BLOCKS TO SEPARATE CACHES FOR DYNAMIC AND STATIC PREDICTION                 |
| 82029188     | Granted | 6205545       | 4/30/1998   | 3/20/2001  | 09/070585          | US | A METHOD AND APPARATUS FOR USING STATIC BRANCH PREDICTIONS HINTS WITH DYNAMICALLY TRANSLATED CODE TRACES TO IMPROVE PERFORMANCE      |
| 82029242     | Granted | 6314560       | 7/14/2000   | 11/6/2001  | 09/616467          | US | Method and apparatus for a translation system that aggressively optimizes and preserves full synchronous exception state             |
| 82029509     | Granted | 6173248       | 2/9/1998    | 1/9/2001   | 09/020653          | US | Method And Apparatus For Handling Masked Exceptions In An Instruction Interpreter                                                    |
| 82029515     | Granted | 6098054       | 11/13/1997  | 8/1/2000   | 08/970064          | US | METHOD OF SECURING SOFTWARE CONFIGURATION PARAMETERS WITH DIGITAL SIGNATURES                                                         |
| 82029638     | Granted | 6182022       | 1/26/1998   | 1/30/2001  | 09/013672          | US | Automated Adaptive Baselineing And Thresholding Method And System                                                                    |
| 82029875     | Granted | 6026402       | 1/7/1998    | 2/15/2000  | 09/004131          | US | A METHOD FOR RESTRICTING A PROCESS OR PROCESS HIERARCHY TO A SUBSET OF A HOST FILE SYSTEM                                            |

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| 82029884     | Granted | 6868450       | 5/17/2000   | 3/15/2005  | 09/572803          | US | System And Method For A Process Attribute Based Compiler<br>Network Filter                                                                      |
| 82029890     | Granted | 6223337       | 12/12/1997  | 4/24/2001  | 08/990064          | US | Random Test Generation For Compiler Optimization                                                                                                |
| 82030196     | Granted | 6101158       | 8/6/1998    | 8/8/2000   | 09/130024          | US | Apparatus And Method For Reducing Phase Discontinuity<br>Between New Data And Previously Written Data On A<br>Read/Write Optical Storage Medium |
| 82030376     | Granted | 6631514       | 1/6/1998    | 10/7/2003  | 09/003572          | US | EMULATION SYSTEM THAT USES DYNAMIC BINARY<br>TRANSLATION AND PERMITS THE SAFE SPECULATION OF<br>TRAPPING OPERATIONS                             |
| 82030496     | Granted | 5949256       | 10/31/1997  | 9/7/1999   | 08/961844          | US | Asymmetric Sense Amplifier For Single-Ended Memory Arrays                                                                                       |
| 82030820     | Granted | 6226787       | 1/25/1999   | 5/1/2001   | 09/236495          | US | Visualization Method And System For Dynamically Displaying<br>Operations Of A Program                                                           |
| 82030829     | Granted | 6076130       | 3/19/1998   | 6/13/2000  | 09/044660          | US | SYSTEM AND METHOD FOR EFFICIENT COMMUNICATION<br>BETWEEN BUSES                                                                                  |
| 82030946     | Granted | 6910122       | 2/18/2000   | 6/21/2005  | 09/507204          | US | METHOD AND APPARATUS FOR PRESERVING PIPELINE DATA<br>DURING A PIPELINE STALL AND FOR RECOVERING FROM THE<br>PIPELINE STALL                      |
| 82030955     | Granted | 6240009       | 2/2/2000    | 5/29/2001  | 09/496714          | US | Asymmetric Ram Cell                                                                                                                             |
| 82031072     | Granted | 6687262       | 2/21/2000   | 2/3/2004   | 09/510280          | US | Distributed Mux Scheme For Bi-Endian Rotator Circuit                                                                                            |
| 82031078     | Granted | 6446187       | 2/19/2000   | 9/3/2002   | 09/507432          | US | Virtual Address Bypassing Using Local Page Mask                                                                                                 |
| 82031240     | Granted | 6507807       | 8/13/1999   | 1/14/2003  | 09/373682          | US | Method And Apparatus For Determining Which Branch Of A<br>Network Of An Integrated Circuit Has The Largest Total<br>Effective RC Delay          |
| 82031330     | Granted | 6823434       | 2/21/2000   | 11/23/2004 | 09/510128          | US | SYSTEM AND METHOD FOR RESETTNG AND INITIALIZING AN<br>ALAT TO A KNOWN STATE AT POWER ON OR THROUGH<br>MACHINE SPECIFIC STATE                    |
| 82031372     | Granted | 6654276       | 1/31/2002   | 11/25/2003 | 10/061917          | US | FOUR-TRANSISTOR STATIC MEMORY CELL ARRAY                                                                                                        |
| 82031489     | Granted | 6507892       | 2/21/2000   | 1/14/2003  | 09/510285          | US | L1 CACHE MEMORY                                                                                                                                 |
| 82031495     | Granted | 6728823       | 2/18/2000   | 4/27/2004  | 09/507203          | US | CACHE CONNECTION WITH BYPASSING FEATURE                                                                                                         |
| 82031501     | Granted | 6427188       | 2/9/2000    | 7/30/2002  | 09/501396          | US | Method And System For Early Tag Accesses For Lower-Level<br>Caches In Parallel With First-Level Cache                                           |
| 82031513     | Granted | 6557078       | 2/21/2000   | 4/29/2003  | 09/510283          | US | Cache Chain Structure To Implement High Bandwidth Low<br>latency Cache Memory Subsystem                                                         |
| 82031519     | Granted | 6539457       | 2/21/2000   | 3/25/2003  | 09/510279          | US | Cache Address Conflict Mechanism Without Store Buffers                                                                                          |
| 82031570     | Granted | 6230240       | 6/23/1998   | 5/8/2001   | 09/103329          | US | Storage Management System And Auto-RAID Transaction<br>Manager For Coherent Memory Map Across Hot Plug<br>Interface                             |

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| 82031630     | Granted | 6226694       | 4/29/1998   | 5/1/2001   | 09/069481          | US | Achieving Consistency And Synchronization Among Multiple Data Stores That Cooperate Within A Single System In The Absence Of Transaction Monitoring        |
| 82031696     | Granted | 6108721       | 6/29/1998   | 8/22/2000  | 09/107008          | US | Method And Apparatus For Ensuring Data Consistency Between An I/O Channel And A Processor                                                                  |
| 82032131     | Granted | 6219827       | 3/12/1998   | 4/17/2001  | 09/041350          | US | Trace Ranking In A Dynamic Translation System                                                                                                              |
| 82032302     | Granted | 6263489       | 4/30/1998   | 7/17/2001  | 09/070542          | US | Method And Apparatus For Debugging Of Optimized Code                                                                                                       |
| 82032452     | Granted | 6580715       | 1/11/1999   | 6/17/2003  | 09/228110          | US | Load Balancing Switch Protocols                                                                                                                            |
| 82032626     | Granted | 6366707       | 4/13/1999   | 4/2/2002   | 09/290429          | US | Imaging Apparatus Alignment System And Method                                                                                                              |
| 82032821     | Granted | 6282175       | 4/23/1998   | 8/28/2001  | 09/065263          | US | Method For Tracking Configuration Changes In Networks Of Computer Systems Through Historical Monitoring Of Configuration Status Of Devices On The Network  |
| 82032881     | Granted | 6272549       | 5/27/1998   | 8/7/2001   | 09/085604          | US | Method For Using Electronic Mail For Exchanging Data Between Computer Systems                                                                              |
| 82032884     | Granted | 6054987       | 5/29/1998   | 4/25/2000  | 09/087338          | US | METHOD OF DYNAMICALLY CREATING NODAL VIEWS OF A MANAGED NETWORK                                                                                            |
| 82033115     | Granted | 6112261       | 5/4/1998    | 8/29/2000  | 09/072425          | US | A Data Transferring System Reading And Temporarily Storing A Record Until A Length Of The Record Is Different From A Defined Record Length Parameter Value |
| 82033124     | Granted | 6138186       | 7/20/1998   | 10/24/2000 | 09/119168          | US | Burst Transfer Management System Utilizing Pointers To Ensure That There Is Enough Space In A Buffer To Receive Burst Transfers Without Corrupting Data    |
| 82033142     | Granted | 6108723       | 7/20/1998   | 8/22/2000  | 09/119164          | US | SYSTEM FOR IMPLEMENTING HARDWARE AUTOMATED CONTROL OF BURST MODE DATA TRANSFER OVER A COMMUNICATION LINK BETWEEN DEVICES OPERATING IN A BLOCK MODE         |
| 82033181     | Granted | 7424597       | 3/31/2003   | 9/9/2008   | 10/403785          | US | Variable Reordering (MUX) Instructions For Parallel Table Lookups From Registers                                                                           |
| 82033193     | Granted | 7274825       | 3/31/2003   | 9/25/2007  | 10/403754          | US | Image Matching Using Pixel-depth Reduction Before Image Comparison                                                                                         |
| 82033490     | Granted | 6314433       | 6/12/1998   | 11/6/2001  | 09/096784          | US | Frame-Based Heroic Data Recovery                                                                                                                           |
| 82033757     | Granted | 6170063       | 3/7/1998    | 1/2/2001   | 09/036617          | US | Method For Performing Atomic, Concurrent Read And Write Operations On Multiple Storage Devices                                                             |
| 82033826     | Granted | 6256777       | 10/9/1998   | 7/3/2001   | 09/169417          | US | Method And Apparatus For Debugging Of Optimized Machine Code, Using Hidden Breakpoints                                                                     |
| 82033925     | Granted | 8108508       | 6/22/1998   | 1/31/2012  | 09/102207          | US | Web Server Chip For Network Manageability                                                                                                                  |
| 82033943     | Granted | 6252961       | 4/2/1998    | 6/26/2001  | 09/053972          | US | Method And Apparatus For Performing Data Encryption And Error Code Correction                                                                              |

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| 82034138     | Granted | 6061235       | 11/18/1998  | 5/9/2000   | 09/195256          | US | Method And Apparatus For A Modular Integrated Apparatus For Heat Dissipation, Processor Integration, Electrical Interface, And Electromagnetic Interference Management |
| 82034198     | Granted | 5915117       | 10/13/1997  | 6/22/1999  | 08/949295          | US | Computer Architecture For The Deferral Of Exceptions Of Speculative Instructions                                                                                       |
| 82034315     | Granted | 5901916       | 3/2/1998    | 5/11/1999  | 09/033352          | US | Tape Cartridge Reel Lock                                                                                                                                               |
| 82034555     | Granted | 6116494       | 9/1/1998    | 9/12/2000  | 09/144656          | US | Method For Re-Attachment Of A SMT Component Using A Heated Air Jet                                                                                                     |
| 82034558     | Granted | 5906497       | 12/12/1997  | 5/25/1999  | 08/989937          | US | Processor Retention Frame And Extraction Device                                                                                                                        |
| 82034639     | Granted | 6269416       | 2/2/1999    | 7/31/2001  | 09/245509          | US | Adaptive PCI Slot                                                                                                                                                      |
| 82034687     | Granted | 6333838       | 6/22/1998   | 12/25/2001 | 09/102731          | US | VOICE COIL ACTUATED CARRIAGE IN WHICH A SUPPORT STRUCTURE FOR THE CARRIAGE IS DISPOSED AT LEAST PARTIALLY WITHIN THE MOTOR                                             |
| 82034747     | Granted | 6282700       | 5/21/1998   | 8/28/2001  | 09/083370          | US | Mechanism For Maintaining Revisions Of Objects In Flash Memory                                                                                                         |
| 82034765     | Granted | 6563706       | 6/23/1998   | 5/13/2003  | 09/103665          | US | TYPICALLY HIGH-AVAILABILITY INFORMATION STORAGE PRODUCT                                                                                                                |
| 82035362     | Granted | 6108800       | 2/10/1998   | 8/22/2000  | 09/021190          | US | Method And Apparatus For Analyzing The Performance Of An Information System                                                                                            |
| 82035365     | Granted | 6819656       | 1/8/1999    | 11/16/2004 | 09/226904          | US | Session Based Scheduling Scheme For Increasing Server Capacity                                                                                                         |
| 82035368     | Granted | 6055564       | 3/11/1998   | 4/25/2000  | 09/038657          | US | ADMISSION CONTROL WHERE PRIORITY INDICATOR IS USED TO DISCRIMINATE BETWEEN MESSAGES                                                                                    |
| 82035503     | Granted | 6295558       | 8/21/1998   | 9/25/2001  | 09/137851          | US | AUTOMATIC STATUS POLLING FAILOVER OR DEVICES IN A DISTRIBUTED NETWORK MANAGEMENT HIERARCHY                                                                             |
| 82035506     | Granted | 6961768       | 7/13/2001   | 11/1/2005  | 09/905307          | US | Status Polling Failover Of Devices In A Distributed Network Management Hierarchy                                                                                       |
| 82035512     | Granted | 6728951       | 4/14/2000   | 4/27/2004  | 09/549346          | US | System And Method For Performing Automated Incremental Compilation Of Computer Programs                                                                                |
| 82035578     | Granted | 6138159       | 6/11/1998   | 10/24/2000 | 09/096134          | US | Load Direction Mechanism                                                                                                                                               |
| 82035737     | Granted | 7430164       | 8/14/2002   | 9/30/2008  | 10/219562          | US | Path Recovery On Failure In Load Balancing Switch Protocols                                                                                                            |
| 82035740     | Granted | 6456597       | 1/11/1999   | 9/24/2002  | 09/228169          | US | Discovery Of Unknown MAC Addresses Using Load Balancing Switch Protocols                                                                                               |
| 82035764     | Granted | 6243791       | 8/13/1998   | 6/5/2001   | 09/133632          | US | Method And Architecture For Data Coherency In Set-Associative Caches Having Specialized Sets                                                                           |
| 82035872     | Granted | 6006269       | 3/11/1998   | 12/21/1999 | 09/038868          | US | Admission Control System With Messages Admitted Or Deferred For Re-Submission At A Later Time On A Priority Basis                                                      |

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| 82035875     | Granted | 6185734       | 7/21/1998   | 2/6/2001   | 09/120037 US       | US | HIERARCHICAL REGISTRY STRUCTURE FOR MANAGING MULTIPLE VERSIONS OF SOFTWARE COMPONENTS                            |
| 82036064     | Granted | 6067619       | 9/24/1998   | 5/23/2000  | 09/160467 US       | US | APPARATUS AND METHOD FOR CONFIGURING A COMPONENT NETWORKING DEVICE                                               |
| 82036070     | Granted | 6092140       | 5/15/1998   | 7/18/2000  | 09/080060 US       | US | Low Latency Bridging Between High Speed Bus Networks                                                             |
| 82036247     | Granted | 6227475       | 3/7/2000    | 5/8/2001   | 09/519955 US       | US | Tape Threading Apparatus                                                                                         |
| 82036298     | Granted | 6055117       | 6/9/1998    | 4/25/2000  | 09/095005 US       | US | Systems And Method Having Data Encoded With Edge Placement Equalization                                          |
| 82036700     | Granted | 6026354       | 8/10/1998   | 2/15/2000  | 09/131561 US       | US | Device Monitoring System With Dedicated Bus And Processor                                                        |
| 82037363     | Granted | 6643226       | 10/27/1998  | 11/4/2003  | 09/179793 US       | US | Mail Slot Data Cartridge Exchange System For Use With A Data Storage System                                      |
| 82037429     | Granted | 6141793       | 4/1/1998    | 10/31/2000 | 09/053567 US       | US | Apparatus And Method For Increasing The Performance Of Interpreted Programs Running On A Server                  |
| 82037447     | Granted | 6405367       | 6/5/1998    | 6/11/2002  | 09/092236 US       | US | Apparatus And Method For Increasing The Performance Of Java Programs Running On A Server                         |
| 82037492     | Granted | 6114895       | 5/8/1998    | 9/5/2000   | 09/075123 US       | US | Integrated Circuit Assembly Having Output Pads With Application Specific Characteristics And Method Of Operation |
| 82037612     | Granted | 6134108       | 6/18/1998   | 10/17/2000 | 09/099512 US       | US | Apparatus And Method For Air-Cooling An Electronic Assembly                                                      |
| 82037672     | Granted | 6507902       | 10/10/2000  | 1/14/2003  | 09/686532 US       | US | DYNAMICALLY ALLOCABLE RAM DISK DYNAMIC RAM DISK                                                                  |
| 82037945     | Granted | 7002921       | 6/9/2003    | 2/21/2006  | 10/457323 US       | US | NETWORK APPLIANCE COMBINING ASYNCHRONOUS NOTIFICATION WITH INTERACTIVE NETWORK TRANSFER PROTOCOL SERVER          |
| 82037984     | Granted | 6243829       | 5/27/1998   | 6/5/2001   | 09/085204 US       | US | Memory Controller Supporting Redundant Synchronous Memories                                                      |
| 82037990     | Granted | 6978397       | 5/1/2001    | 12/20/2005 | 09/846868 US       | US | Memory Controller Supporting Redundant Synchronous Memories                                                      |
| 82038008     | Granted | 6344862       | 5/29/1998   | 2/5/2002   | 09/087066 US       | US | USER INTERFACE MECHANISM FOR MANIPULATING CONTEXT IN COMPUTER MANAGEMENT APPLICATIONS                            |
| 82038134     | Granted | 6304416       | 3/20/1998   | 10/16/2001 | 09/045548 US       | US | Two Axis Reading Of Memory Chip In Cartridge                                                                     |
| 82038800     | Granted | 6115251       | 4/15/1999   | 9/5/2000   | 09/294305 US       | US | Cooling Apparatus For Computer Subsystem                                                                         |
| 82038821     | Granted | 6446131       | 6/19/1999   | 9/3/2002   | 09/336551 US       | US | Bridges And Other Layer-Two Devices For Forwarding MAC Frames                                                    |
| 82039673     | Granted | 6167533       | 6/25/1998   | 12/26/2000 | 09/104836 US       | US | Active Dashboard Extensible Framework                                                                            |
| 82039796     | Granted | 6052684       | 3/24/1998   | 4/18/2000  | 09/046967 US       | US | System And Method For Performing Consistent Workflow Process Execution In A Workflow Management System           |
| 82040111     | Granted | 6195726       | 3/24/1999   | 2/27/2001  | 09/275286 US       | US | Method And Apparatus For Performing Patterned Read And Write Operations                                          |

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| 82040378     | Granted | 6128699       | 10/27/1998  | 10/3/2000  | 09/181067          | US | METHOD FOR PROVIDING READ/WRITE ACCESS WHILE COPYING DATA BETWEEN SHARED STORAGE DEVICES                                                                               |
| 82040438     | Granted | 6662171       | 10/30/2000  | 12/9/2003  | 09/699881          | US | Automated Diagnostic Metric Loop                                                                                                                                       |
| 82040759     | Granted | 6141703       | 7/21/1998   | 10/31/2000 | 09/120679          | US | AN INTERRUPT SHARING SYSTEM ASSIGNING EACH INTERRUPT REQUEST SIGNAL TO A SELECT ONE OF SYSTEM INTERRUPT SIGNALS BASED ON CHARACTERISTIC DATA OF EACH PERIPHERAL DEVICE |
| 82040858     | Granted | 8171266       | 8/2/2001    | 5/1/2012   | 09/922551          | US | Look-ahead Load Pre-fetch In A Processor                                                                                                                               |
| 82040981     | Granted | 6158047       | 7/8/1998    | 12/5/2000  | 09/111956          | US | CLIENT/SERVER SYSTEM FOR FAST, USER TRANSPARENT AND MEMORY EFFICIENT COMPUTER LANGUAGE TRANSLATION                                                                     |
| 82040984     | Granted | 6230182       | 7/8/1998    | 5/8/2001   | 09/111964          | US | COMPUTER LANGUAGE INTERPRETER WHICH CAN PERFORM TIME-CONSUMING OPERATIONS WITH MINIMAL IMPACT ON INTERACTIVE PROGRAMS                                                  |
| 82041194     | Granted | 6163867       | 8/28/1998   | 12/19/2000 | 09/141957          | US | INPUT-OUTPUT PAD TESTING USING BI-DIRECTIONAL PADS                                                                                                                     |
| 82041680     | Granted | 6138121       | 5/29/1998   | 10/24/2000 | 09/087203          | US | Network Management Event Storage And Manipulation Using Relational Database Technology In A Data Warehouse                                                             |
| 82041737     | Granted | 6175539       | 8/28/1998   | 1/16/2001  | 09/143688          | US | SYSTEM AND METHOD FOR PROVIDING WIRELESS CONTROL SIGNALS TO CARTRIDGE ACCESS DEVICE IN A CARTRIDGE STORAGE SYSTEM                                                      |
| 82041791     | Granted | 6389514       | 3/25/1999   | 5/14/2002  | 09/277006          | US | Method And Computer System For Speculatively Closing Pages In Memory                                                                                                   |
| 82041794     | Granted | 6751056       | 11/6/1998   | 6/15/2004  | 09/187138          | US | Tape Drive Head Cleaner                                                                                                                                                |
| 82041929     | Granted | 6553509       | 7/28/1999   | 4/22/2003  | 09/363917          | US | Log Record Parsing For A Distributed Log On A Disk Array Data Storage System                                                                                           |
| 82041986     | Granted | 6308318       | 10/7/1998   | 10/23/2001 | 09/167284          | US | METHOD AND APPARATUS FOR HANDLING ASYNCHRONOUS EXCEPTIONS IN A DYNAMIC TRANSLATION SYSTEM                                                                              |
| 82042043     | Granted | 6256641       | 12/15/1998  | 7/3/2001   | 09/212739          | US | CLIENT TRANSPARENCY SYSTEM AND METHOD THEREFOR                                                                                                                         |
| 82042112     | Granted | 6766424       | 2/9/1999    | 7/20/2004  | 09/246490          | US | Computer Architecture With Dynamic Sub-page Placement                                                                                                                  |
| 82042229     | Granted | 6125044       | 3/23/1999   | 9/26/2000  | 09/274722          | US | SUPPRESSING EMI WITH PCB MOUNTED FERRITE ATTENUATOR                                                                                                                    |
| 82042256     | Granted | 6045086       | 10/2/1998   | 4/4/2000   | 09/165518          | US | Method And Apparatus For Improved Tape Packing                                                                                                                         |
| 82042316     | Granted | 6336138       | 8/25/1998   | 1/1/2002   | 09/139959          | US | TEMPLATE-DRIVEN APPROACH FOR GENERATING MODELS ON NETWORK SERVICES                                                                                                     |
| 82042433     | Granted | 6092762       | 9/10/1998   | 7/25/2000  | 09/150872          | US | Tape Leader Pin Clamp And Method For Securing Same To Leader Pin Assembly                                                                                              |
| 82042541     | Granted | 6124996       | 10/20/1998  | 9/26/2000  | 09/175908          | US | Servo System And Method With Multiple Phase Clock                                                                                                                      |

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| 82042562     | Granted | 6122124       | 10/20/1998  | 9/19/2000  | 09/175907          | US | Servo System And Method With Digitally Controlled Oscillator                                                                                                                             |
| 82042613     | Granted | 6775695       | 10/29/1999  | 8/10/2004  | 09/431544          | US | Client Session Depth Based Caching In Proxy Servers                                                                                                                                      |
| 82042667     | Granted | 6205466       | 7/17/1998   | 3/20/2001  | 09/118248          | US | Infrastructure For An Open Digital Services Marketplace                                                                                                                                  |
| 82043111     | Granted | 7296265       | 3/9/1999    | 11/13/2007 | 09/264756          | US | Class Loading In A Virtual Machine For A Platform Having Minimal Resources                                                                                                               |
| 82043114     | Granted | 6332216       | 3/9/1999    | 12/18/2001 | 09/264755          | US | HYBRID JUST-IN-TIME COMPILER THAT CONSUMES MINIMAL RESOURCE                                                                                                                              |
| 82043294     | Granted | 6163454       | 2/22/1999   | 12/19/2000 | 09/255408          | US | ELECTROMAGNETIC INTERFERENCE (EMI) SHIELD FOR ELECTRICAL COMPONENTS, AN INTERNAL EMI BARRIER, AND A STORAGE ENCLOSURE FOR ELECTRICAL/ELECTRONIC COMPONENTS                               |
| 82043567     | Granted | 6246403       | 10/8/1998   | 6/12/2001  | 09/168841          | US | METHOD AND APPARATUS FOR GENERATING A GRAPHICAL USER INTERFACE                                                                                                                           |
| 82043750     | Granted | 6625681       | 3/29/1999   | 9/23/2003  | 09/272798          | US | State Activated One Shot With Extended Pulse Timing For Hot-Swap Applications                                                                                                            |
| 82043753     | Granted | 6961795       | 7/21/2003   | 11/1/2005  | 10/623173          | US | APPARATUS FOR SAFE INSTALLATION AND REMOVAL OF A CIRCUIT BOARD FOR HOT SWAP APPLICATIONS                                                                                                 |
| 82043756     | Granted | 6140926       | 7/21/1999   | 10/31/2000 | 09/359142          | US | Redundant Status Indicators For Fault Tolerance                                                                                                                                          |
| 82044059     | Granted | 6191945       | 1/29/1999   | 2/20/2001  | 09/240266          | US | Cold Plate Arrangement For Cooling Processor And Companion Voltage Regulator                                                                                                             |
| 82044167     | Granted | 6625159       | 11/30/1998  | 9/23/2003  | 09/201510          | US | Nonblocking And Fair Queuing Switching Method And Shared Memory Packet Switch                                                                                                            |
| 82044350     | Granted | 7055040       | 5/10/2002   | 5/30/2006  | 10/143080          | US | Method And Apparatus For Uniquely And Securely Loading Software To An Individual Computer                                                                                                |
| 82044416     | Granted | 6260079       | 11/15/1998  | 7/10/2001  | 09/192548          | US | METHOD AND SYSTEM FOR ENHANCING FIBRE CHANNEL LOOP RESILIENCY FOR A MASS STORAGE ENCLOSURE BY INCREASING COMPONENT REDUNDANCY AND USING SHUNT ELEMENTS AND INTELLIGENT BYPASS MANAGEMENT |
| 82044437     | Granted | 6898184       | 11/15/1998  | 5/24/2005  | 09/192547          | US | Private Arbitrated Loop Self-test Management For A Fibre Channel Storage Enclosure                                                                                                       |
| 82044479     | Granted | 6274807       | 11/13/1998  | 8/14/2001  | 09/191962          | US | METHOD AND APPARATUS FOR CONTROLLING ELECTROMAGNETIC RADIATION EMISSIONS GENERATED BY ELECTRICAL COMPONENTS                                                                              |
| 82044482     | Granted | 6728099       | 11/13/1998  | 4/27/2004  | 09/191964          | US | Electrical Component Having A Hybrid Air Cooling System And Method                                                                                                                       |
| 82044545     | Granted | 6813113       | 2/25/1999   | 11/2/2004  | 09/257322          | US | DATA CARTRIDGE EXCHANGE APPARATUS                                                                                                                                                        |
| 82045049     | Granted | 6522989       | 2/29/2000   | 2/18/2003  | 09/515446          | US | System And Method For Timing Analysis Of An Integrated Circuit Clocked By Mixed Clock Types                                                                                              |

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| 82045304     | Granted | 7030408       | 10/26/2000  | 4/18/2006  | 09/699080          | US | Molecular Wire Transistor (MWT)                                                                                                                                                                                 |
| 82045310     | Granted | 6128214       | 3/29/1999   | 10/3/2000  | 09/280189          | US | Molecular Wire Crossbar Memory                                                                                                                                                                                  |
| 82045313     | Granted | 7948271       | 3/29/1999   | 5/24/2011  | 09/282045          | US | Molecular Wire Crossbar Logic (MWCL)                                                                                                                                                                            |
| 82045316     | Granted | 6256767       | 3/29/1999   | 7/3/2001   | 09/282049          | US | Demultiplexer For A Molecular Wire Crossbar Network (MWCN Demux)                                                                                                                                                |
| 82045478     | Granted | 6317788       | 10/30/1998  | 11/13/2001 | 09/183420          | US | ROBOT POLICIES FOR MONITORING AVAILABILITY AND RESPONSE OF NETWORK PERFORMANCE AS SEEN FROM USER PERSPECTIVE                                                                                                    |
| 82045679     | Granted | 6229691       | 11/13/1998  | 5/8/2001   | 09/192397          | US | Apparatus And Method For Mounting A Power Distributor Unit Within An Equipment Enclosure                                                                                                                        |
| 82046123     | Granted | 6345277       | 2/26/1999   | 2/5/2002   | 09/258575          | US | METHOD AND APPARATUS FOR USING AN INFORMATION MODEL TO ORGANIZE AN INFORMATION REPOSITORY INTO AN EXTENSIBLE                                                                                                    |
| 82046168     | Granted | 6480471       | 12/21/1998  | 11/12/2002 | 09/217418          | US | Hardware Sampler For Statistical Monitoring Of Network Traffic                                                                                                                                                  |
| 82046723     | Granted | 6298429       | 9/12/2000   | 10/2/2001  | 09/660032          | US | Memory address generator capable of row-major and column-major sweeps                                                                                                                                           |
| 82046726     | Granted | 6175518       | 3/30/1999   | 1/16/2001  | 09/281612          | US | REMOTE REGISTER HIERARCHY ACCESSIBLE USING A SERIAL DATA LINE                                                                                                                                                   |
| 82047557     | Granted | 6618766       | 9/29/1999   | 9/9/2003   | 09/408734          | US | Correlating Protocol Events In Distributed Applications                                                                                                                                                         |
| 82048241     | Granted | 6351796       | 2/22/2000   | 2/26/2002  | 09/510328          | US | Methods And Apparatus For Increasing The Efficiency Of A Higher Level Cache By Selectively Performing Writes To The Higher Level Cache                                                                          |
| 82048499     | Granted | 6385557       | 9/8/1999    | 5/7/2002   | 09/392199          | US | TRACKING THE REMAINING USEFUL LIFE OF A MAGNETIC DATA STORAGE TAPE                                                                                                                                              |
| 82048613     | Granted | 6271845       | 3/10/2000   | 8/7/2001   | 09/523387          | US | Method and structure for dynamically drilling down through a health monitoring map to determine the health status and cause of health problems associated with network objects of a managed network environment |
| 82048616     | Granted | 7146568       | 8/6/2001    | 12/5/2006  | 09/923045          | US | DYNAMICALLY DRILLING-DOWN THROUGH A HEALTH MONITORING MAP TO DETERMINE THE HEALTH STATUS AND CAUSE OF HEALTH PROBLEMS ASSOCIATED WITH NETWORK OBJECTS OF A MANAGED NETWORK ENVIRONMENT                          |
| 82048625     | Granted | 6198630       | 1/20/1999   | 3/6/2001   | 09/234127          | US | Method And Apparatus For Electrical And Mechanical Attachment, And Electromagnetic Interference And Thermal Management Of High Speed, High Density VLSI Modules                                                 |
| 82049063     | Granted | 6772106       | 8/20/1999   | 8/3/2004   | 09/378580          | US | Retargetable Computer Design System                                                                                                                                                                             |
| 82049240     | Granted | 6473371       | 2/14/2000   | 10/29/2002 | 09/503458          | US | Media Handling Device Having Replaceable Modules                                                                                                                                                                |

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| 82049309     | Granted | 6826683       | 10/23/2000  | 11/30/2004 | 09/695184          | US | PREDICTING THE HEALTH OF A COMPUTER SYSTEM BY DETERMINING A SET OF MODIFICATIONS INVOLVED IN A PROPOSED INTERVENTION TO AN EXISTING SYSTEM |
| 82049312     | Granted | 7246229       | 10/19/2004  | 7/17/2007  | 10/968547          | US | Predicting The Health Of A System That Would Result From The Application Of A Proposed Intervention To An Existing System                  |
| 82049621     | Granted | 6167463       | 4/8/1999    | 12/26/2000 | 09/288408          | US | Firm Addressing For Devices On A Fibre Channel Arbitrated Loop                                                                             |
| 82049807     | Granted | 6219239       | 5/26/1999   | 4/17/2001  | 09/320412          | US | EMI REDUCTION DEVICE AND ASSEMBLY                                                                                                          |
| 82050107     | Granted | 6201711       | 5/18/1999   | 3/13/2001  | 09/314484          | US | Computer System Housing For Attenuating Electromagnetic Interference (EMI)                                                                 |
| 82050311     | Granted | 6477703       | 6/29/1999   | 11/5/2002  | 09/342763          | US | Software Patch Selection Tool                                                                                                              |
| 82050356     | Granted | 6233662       | 4/26/1999   | 5/15/2001  | 09/299478          | US | Method And Apparatus For Interleaving Memory Across Computer Memory Banks                                                                  |
| 82050416     | Granted | 6389370       | 9/14/1999   | 5/14/2002  | 09/395500          | US | System And Method For Determining Which Objects In A Set Of Objects Should Be Processed                                                    |
| 82050782     | Granted | 6665698       | 5/12/2000   | 12/16/2003 | 09/569658          | US | HIGH SPEED INCREMENTER/DECREMENTER                                                                                                         |
| 82050794     | Granted | 7075896       | 3/16/2000   | 7/11/2006  | 09/526830          | US | Method For Automatic Layout Of Switched Network Topologies                                                                                 |
| 82051118     | Granted | 6725335       | 1/5/2001    | 4/20/2004  | 09/755780          | US | Method And System For Fast Unlinking Of A Linked Branch In A Caching Dynamic Translator                                                    |
| 82051166     | Granted | 6363524       | 9/10/1999   | 3/26/2002  | 09/393904          | US | System And Method For Assessing The Need For Installing Software Patches In A Computer System                                              |
| 82051484     | Granted | 6633449       | 5/22/2000   | 10/14/2003 | 09/575841          | US | High Bandwidth Tape Positioning System And Servo Controlled Rollers For Active Tape Positioning                                            |
| 82051493     | Granted | 7340600       | 1/14/2000   | 3/4/2008   | 09/483185          | US | Authorization Infrastructure Based On Public Key Cryptography                                                                              |
| 82051544     | Granted | 6309262       | 10/21/1999  | 10/30/2001 | 09/422875          | US | A BIFURCATED CONTACT WITH A CONNECTING MEMBER AT THE TIP OF THE CONTACT                                                                    |
| 82051607     | Granted | 6618783       | 10/29/1999  | 9/9/2003   | 09/430369          | US | Method And System For Managing A PCI Bus Coupled To Another System                                                                         |
| 82051622     | Granted | 6934283       | 11/8/1999   | 8/23/2005  | 09/436062          | US | System And Method For Source Defined Packet Routing                                                                                        |
| 82051790     | Granted | 6516425       | 10/29/1999  | 2/4/2003   | 09/430403          | US | RAID Rebuild Using Most Vulnerable Data Redundancy Scheme First                                                                            |
| 82051853     | Granted | 7007020       | 3/10/2000   | 2/28/2006  | 09/524140          | US | DISTRIBUTED OLAP-BASED ASSOCIATION RULE GENERATION METHOD AND SYSTEM                                                                       |
| 82051856     | Granted | 6917940       | 3/10/2000   | 7/12/2005  | 09/523446          | US | Olap-based Customer Behavior Profiling Method And System                                                                                   |
| 82051859     | Granted | 8190554       | 7/1/2004    | 5/29/2012  | 10/882925          | US | Olap-based Customer Behavior Profiling Method And System                                                                                   |

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| 82051865     | Granted | 7822629       | 12/15/1999  | 10/26/2010 | 09/464311          | US | Customer Profiling Apparatus For Conducting Customer Behavior Pattern Analysis, And Method For Comparing Customer Behavior Patterns  |
| 82052345     | Granted | 7412468       | 10/14/2003  | 8/12/2008  | 10/686331          | US | Generation Of Cryptographically Strong Random Numbers Using MISRS                                                                    |
| 82052933     | Granted | 6888836       | 5/26/1999   | 5/3/2005   | 09/318722          | US | METHOD FOR ALLOCATING WEB SITES ON A WEB HOSTING CLUSTER                                                                             |
| 82053986     | Granted | 6904593       | 3/24/2000   | 6/7/2005   | 09/534703          | US | Method Of Administering Software Components Using Asynchronous Messaging In A Multi-Platform, Multi-Programming Language Environment |
| 82054055     | Granted | 6986075       | 2/23/2001   | 1/10/2006  | 09/792443          | US | Storage-device Activation Control For A High-availability Storage System                                                             |
| 82054217     | Granted | 7143315       | 10/16/2003  | 11/28/2006 | 10/688487          | US | Data Storage Systems And Methods                                                                                                     |
| 82054976     | Granted | 6832370       | 5/9/2000    | 12/14/2004 | 09/566990          | US | Data Speculation Within Modulo Scheduled Loops                                                                                       |
| 82055114     | Granted | 7385716       | 9/2/1999    | 6/10/2008  | 09/388891          | US | AUTHORING TOOL FOR BAYESIAN NETWORK TROUBLESHOOTERS                                                                                  |
| 82055480     | Granted | 6624482       | 2/22/2002   | 9/23/2003  | 10/079531          | US | Method For Creating A Useful Bipolar Junction Transistor From A Parasitic Bipolar Junction Transistor On A Mosfet                    |
| 82055483     | Granted | 6594786       | 1/31/2000   | 7/15/2003  | 09/495431          | US | Fault Tolerant High Availability Meter                                                                                               |
| 82055654     | Granted | 6230903       | 10/27/1999  | 5/15/2001  | 09/428120          | US | Snap-On Rack Slide Mounting System                                                                                                   |
| 82056476     | Granted | 7249192       | 3/9/2000    | 7/24/2007  | 09/521827          | US | Protocol For Insuring Exactly Once Semantics Of Transactions Across An Unordered, Unreliable Network                                 |
| 82056527     | Granted | 6591257       | 12/23/1999  | 7/8/2003   | 09/472389          | US | Apparatus And Method For A Compositional Decision Support Reasoning System                                                           |
| 82056533     | Granted | 6728692       | 12/23/1999  | 4/27/2004  | 09/470848          | US | Apparatus For A Multi-Modal Ontology Engine                                                                                          |
| 82058024     | Granted | 6738976       | 12/17/1999  | 5/18/2004  | 09/466543          | US | Method, System, And Apparatus To Minimize Exception Handling Overhead From Invoked Functions                                         |
| 82058042     | Granted | 7010593       | 4/30/2001   | 3/7/2006   | 09/845429          | US | DYNAMIC GENERATION OF CONTEXT-SENSITIVE DATA AND INSTRUCTIONS FOR TROUBLESHOOTING PROBLEM EVENTS IN A COMPUTING ENVIRONMENT          |
| 82058099     | Granted | 6944607       | 10/4/2000   | 9/13/2005  | 09/684488          | US | Aggregated Clustering Method And System                                                                                              |
| 82058216     | Granted | 6757870       | 3/22/2000   | 6/29/2004  | 09/532538          | US | Automatic Table Detection Method And System                                                                                          |
| 82058228     | Granted | 6699779       | 3/22/2002   | 3/2/2004   | 10/104348          | US | Method For Making Nanoscale Wires And Gaps For Switches And Transistors                                                              |
| 82058405     | Granted | 6865601       | 2/11/2000   | 3/8/2005   | 09/502718          | US | METHOD FOR ALLOCATING WEB SITES ON A WEB SERVER CLUSTER BASED ON BALANCING MEMORY AND LOAD REQUIREMENTS                              |
| 82058465     | Granted | 6897885       | 6/19/2000   | 5/24/2005  | 09/596804          | US | Invisible Link Visualization Method And System In A Hyperbolic Space                                                                 |

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| 82058486     | Granted | 6735637       | 6/28/2001   | 5/11/2004  | 09/895476          | US | METHOD AND SYSTEM FOR PROVIDING ADVANCED WARNING TO A DATA STAGE DEVICE IN ORDER TO DECLASSIFY THE TIME FOR A MIRROR SPLIT OPERATION WITHOUT STARVING HOST I/O REQUEST PROCESSING |
| 82058600     | Granted | 6742016       | 3/24/2000   | 5/25/2004  | 09/535101          | US | REQUEST ACCEPTOR FOR A NETWORK APPLICATION SYSTEM AND A METHOD THEREOF                                                                                                            |
| 82058603     | Granted | 7117263       | 2/1/2000    | 10/3/2006  | 09/495818          | US | APPARATUS AND METHOD FOR PROCESSING REQUESTS FROM AN EXTERNAL QUEUE IN A TCP/IP-BASED APPLICATION SYSTEM                                                                          |
| 82058666     | Granted | 6487636       | 4/24/2000   | 11/26/2002 | 09/556221          | US | Method And Apparatus For Mapping Data In A Heterogeneous Disk Array Storage System                                                                                                |
| 82058852     | Granted | 6471415       | 7/18/2000   | 10/29/2002 | 09/618207          | US | Multiconductor Interconnect                                                                                                                                                       |
| 82059212     | Granted | 7032222       | 10/13/2000  | 4/18/2006  | 09/687436          | US | METHOD AND SYSTEM FOR DETERMINING RESOURCE ALLOCATION TO USERS BY GRANTING REQUEST BASED ON USER ASSOCIATED DIFFERENT LIMITS AND RESOURCE LIMIT                                   |
| 82059239     | Granted | 6687805       | 10/30/2000  | 2/3/2004   | 09/699596          | US | Method And System For Logical-object-to-physical-location Translation And Physical Separation Of Logical Objects                                                                  |
| 82059359     | Granted | 6971094       | 2/22/2000   | 11/29/2005 | 09/510747          | US | Deployed Agent Used In The Installation And Maintenance Of Software                                                                                                               |
| 82060034     | Granted | 7159173       | 3/7/2001    | 1/2/2007   | 09/801478          | US | Method, Computer System And Computer Program Product For Printing A Document Page                                                                                                 |
| 82060049     | Granted | 6732118       | 3/26/2001   | 5/4/2004   | 09/817486          | US | METHOD, COMPUTER SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR MONITORING OBJECTS OF AN INFORMATION TECHNOLOGY ENVIRONMENT                                                             |
| 82060091     | Granted | 7171554       | 8/13/2001   | 1/30/2007  | 09/928859          | US | Method, Computer Program Product And System For Providing A Switch User Functionality In An Information Technological Network                                                     |
| 82060589     | Granted | 6004619       | 11/7/1997   | 12/21/1999 | 08/965853          | US | PROCESS FOR MANUFACTURING PRINTED CIRCUIT BOARDS                                                                                                                                  |
| 82061657     | Granted | 6952768       | 12/7/2000   | 10/4/2005  | 09/733540          | US | Security Protocol                                                                                                                                                                 |
| 82061672     | Granted | 6886032       | 6/8/2001    | 4/26/2005  | 09/876161          | US | Utilization Of Unused Disk Space On Networked Computer                                                                                                                            |
| 82061897     | Granted | 6898754       | 4/9/2001    | 5/24/2005  | 09/828188          | US | Error Detection For Data Storage And Transmission                                                                                                                                 |
| 82062101     | Granted | 6925288       | 3/29/2001   | 8/2/2005   | 09/821146          | US | Gathering Information From Short-range Wireless Portals                                                                                                                           |
| 82062347     | Granted | 6941476       | 5/10/2001   | 9/6/2005   | 09/852262          | US | Information Storage                                                                                                                                                               |
| 82062467     | Granted | 6845464       | 4/27/2001   | 1/18/2005  | 09/842872          | US | Performing Operating System Recovery From External Backup Media In A Headless Computer Entity                                                                                     |
| 82062476     | Granted | 6845466       | 4/27/2001   | 1/18/2005  | 09/843144          | US | MANAGING DISK DRIVE REPLACEMENTS ON MULTIDISK HEADLESS APPLIANCES                                                                                                                 |

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| 82062485     | Granted | 7281159       | 1/3/2005    | 10/9/2007  | 11/025937          | US | Managing Disk Drive Replacements On Multidisk Headless Appliances                       |
| 82062653     | Granted | 6975470       | 10/30/2001  | 12/13/2005 | 09/984619          | US | Data Readers                                                                            |
| 82062713     | Granted | 7877799       | 8/1/2001    | 1/25/2011  | 09/920554          | US | Performance Of A Service On A Computing Platform                                        |
| 82062731     | Granted | 6754767       | 3/19/2001   | 6/22/2004  | 09/810171          | US | Self Managing Fixed Configuration Raid Disk In Headless Appliance                       |
| 82062773     | Granted | 8166173       | 10/16/2001  | 4/24/2012  | 09/977497          | US | Inviting Assistant Entity Into A Network Communication Session                          |
| 82062791     | Granted | 6996605       | 10/16/2001  | 2/7/2006   | 09/977496          | US | OVERVIEW SUBSYSTEM FOR INFORMATION PAGE SERVICE                                         |
| 82062830     | Granted | 7026983       | 7/13/2001   | 4/11/2006  | 09/905774          | US | Location Data Diffusion And Location Discovery                                          |
| 82062848     | Granted | 7305212       | 7/13/2001   | 12/4/2007  | 09/905775          | US | Message Passing To A Known Location                                                     |
| 82062854     | Granted | 7171361       | 12/13/2001  | 1/30/2007  | 10/013934          | US | Idiom Handling In Voice Service Systems                                                 |
| 82063529     | Granted | 7353531       | 2/22/2002   | 4/1/2008   | 10/080477          | US | Trusted Computing Environment                                                           |
| 82063535     | Granted | 7159210       | 6/18/2002   | 1/2/2007   | 10/175553          | US | Performing Secure And Insecure Computing Operations In A Compartmented Operating System |
| 82063544     | Granted | 7865876       | 6/18/2002   | 1/4/2011   | 10/175542          | US | MULTIPLE TRUSTED COMPUTING ENVIRONMENTS                                                 |
| 82063610     | Granted | 7596702       | 6/27/2002   | 9/29/2009  | 10/180977          | US | Network Storage Devices                                                                 |
| 82063643     | Granted | 6986042       | 8/17/2001   | 1/10/2006  | 10/110950          | US | COMPUTER SYSTEM OPERABLE TO REVERT TO A TRUSTED STATE                                   |
| 82063775     | Granted | 6757848       | 6/19/2001   | 6/29/2004  | 09/883382          | US | Recovery Of User Data From Partially Incorrect Data Set In Tape Data Storage System     |
| 82064024     | Granted | 8769478       | 4/22/2005   | 7/1/2014   | 11/111866          | US | Aggregation Of Multiple Headless Computer Entities Into A Single Computer Entity Group  |
| 82064081     | Granted | 7082497       | 12/28/2001  | 7/25/2006  | 10/034083          | US | System And Method For Managing A Moveable Media Library With Library Partitions         |
| 82064093     | Granted | 6862149       | 6/18/2001   | 3/1/2005   | 09/881763          | US | Searching For Append Point In Data Storage Device                                       |
| 82064096     | Granted | 6694404       | 7/31/2001   | 2/17/2004  | 09/917785          | US | METHOD OF IDENTIFYING DATA WITH SAME TIME STAMP ON DIFFERENT TRACKS IN STORAGE DEVICE   |
| 82064099     | Granted | 6693755       | 7/31/2001   | 2/17/2004  | 09/917781          | US | DATA STORAGE                                                                            |
| 82064102     | Granted | 7042667       | 7/31/2001   | 5/9/2006   | 09/917952          | US | DATA STORAGE                                                                            |
| 82064105     | Granted | 6883122       | 7/31/2001   | 4/19/2005  | 09/917768          | US | WRITE PASS ERROR DETECTION                                                              |
| 82064153     | Granted | 6877127       | 7/31/2001   | 4/5/2005   | 09/917769          | US | Quality Control In Data Transfer And Storage Apparatus                                  |
| 82064294     | Granted | 7296299       | 7/3/2001    | 11/13/2007 | 09/897424          | US | Tamper-evident And/or Tamper-resistant Electronic Components                            |
| 82064336     | Granted | 7702549       | 7/12/2002   | 4/20/2010  | 10/194339          | US | Sharing Of State Information                                                            |
| 82064399     | Granted | 7039835       | 7/3/2002    | 5/2/2006   | 10/188336          | US | Drop-out Management System And Method                                                   |
| 82064594     | Granted | 7444666       | 7/25/2002   | 10/28/2008 | 10/202816          | US | Multi-domain Authorization And Authentication                                           |
| 82064771     | Granted | 7702763       | 7/31/2002   | 4/20/2010  | 10/207802          | US | Remote Monitoring Of Computer Devices                                                   |
| 82065206     | Granted | 8370631       | 7/29/2002   | 2/5/2013   | 10/208716          | US | Trusted Identities On A Trusted Computing Platform                                      |

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| 82065521     | Granted | 6715031       | 12/28/2001  | 3/30/2004  | 10/034691          | US | System And Method For Partitioning A Storage Area Network<br>Associated Data Library                                    |
| 82065530     | Granted | 6839824       | 12/28/2001  | 1/4/2005   | 10/033009          | US | System And Method For Partitioning A Storage Area Network<br>Associated Data Library Employing Element Addresses        |
| 82065539     | Granted | 7062614       | 12/28/2001  | 6/13/2006  | 10/032662          | US | System And Method For Managing Access To Multiple<br>Devices In A Partitioned Data Library                              |
| 82065578     | Granted | 6999999       | 12/28/2001  | 2/14/2006  | 10/033010          | US | System And Method For Securing Fiber Channel Drive Access<br>In A Partitioned Data Library                              |
| 82065590     | Granted | 8788611       | 12/28/2001  | 7/22/2014  | 10/033003          | US | Method For Using Partitioning To Provide Capacity On<br>Demand In Data Libraries                                        |
| 82065599     | Granted | 6845431       | 12/28/2001  | 1/18/2005  | 10/034580          | US | System And Method For Intermediating Communication With<br>A Moveable Media Library Utilizing A Plurality Of Partitions |
| 82065905     | Granted | 7096409       | 7/30/2003   | 8/22/2006  | 10/632125          | US | Reed-solomon Decoder And Decoding Method For Errors And<br>Erasures Decoding                                            |
| 82065911     | Granted | 7278086       | 7/30/2003   | 10/2/2007  | 10/632123          | US | Identifying Uncorrectable Codewords In A Reed-solomon<br>Decoder For Errors And Erasures                                |
| 82066025     | Granted | 7086052       | 1/3/2003    | 8/1/2006   | 10/336590          | US | Software Installation And Operation With Random Selection                                                               |
| 82066034     | Granted | 7904504       | 10/31/2001  | 3/8/2011   | 09/984969          | US | POLICY ENFORCEMENT AND ACCESS CONTROL FOR<br>DISTRIBUTED NETWORKED SERVICES                                             |
| 82066202     | Granted | 6983146       | 6/3/2002    | 1/3/2006   | 10/162036          | US | Location Determination Using Location Data Items Received<br>By Short-Range Communication                               |
| 82066208     | Granted | 6714161       | 6/3/2002    | 3/30/2004  | 10/162037          | US | Location Determination Using Location Data Items Received<br>By Short-Range Communication                               |
| 82066274     | Granted | 7219226       | 10/11/2002  | 5/15/2007  | 10/270039          | US | Method And Apparatus For Encrypting Data                                                                                |
| 82066391     | Granted | 6282042       | 9/22/1997   | 8/28/2001  | 08/934765          | US | Data Processing Apparatus And Methods                                                                                   |
| 82066409     | Granted | 5896067       | 9/22/1997   | 4/20/1999  | 08/935048          | US | DATA PROCESSING APPARATUS AND METHODS INCLUDING A<br>PHASE LOCK LOOP                                                    |
| 82066517     | Granted | 5949866       | 2/19/1997   | 9/7/1999   | 08/803058          | US | COMMUNICATIONS SYSTEM FOR ESTABLISHING A<br>COMMUNICATION CHANNEL ON THE BASIS OF A<br>FUNCTIONAL RULE OR TASK          |
| 82066847     | Granted | 6307892       | 1/17/1997   | 10/23/2001 | 08/913899          | US | OFDM FEC                                                                                                                |
| 82067411     | Granted | 6373859       | 9/10/1997   | 4/16/2002  | 09/068383          | US | METHODS AND APPARATUS FOR ENCODING AND DECODING<br>DATA                                                                 |
| 82067456     | Granted | 6115208       | 10/15/1997  | 9/5/2000   | 08/951047          | US | TAPE DRIVES FOR USE WITH TAPE CARTRIDGES                                                                                |
| 82067471     | Granted | 6263454       | 7/7/1997    | 7/17/2001  | 08/888716          | US | Storage System                                                                                                          |
| 82067711     | Granted | 6985325       | 7/31/2001   | 1/10/2006  | 09/917783          | US | UPDATEABLE CENTRALIZED DATA POSITION INFORMATION<br>STORAGE SYSTEM                                                      |

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| 82067726     | Granted   | 6268975       | 3/12/1999   | 7/31/2001  | 09/266926          | US | TAPE DRIVE UTILIZING ENCODED FILE MARKERS TO LOCATE TARGET POSITIONS                                                                                                                                       |
| 82067774     | Granted   | 6282040       | 2/12/1999   | 8/28/2001  | 09/249023          | US | WRITE PASS IDENTIFIER                                                                                                                                                                                      |
| 82067780     | Granted   | 6282039       | 10/30/1998  | 8/28/2001  | 09/182444          | US | SCRATCH PROTECTION IN TAPE DATA STORAGE SYSTEM                                                                                                                                                             |
| 82067855     | Granted   | 6272614       | 4/30/1999   | 8/7/2001   | 09/303460          | US | PROCESSING METHOD AND APPARATUS INVOLVING A PROCESSOR INSTRUCTION USING HASHING                                                                                                                            |
| 82067957     | Granted   | 6941502       | 10/31/2001  | 9/6/2005   | 09/984976          | US | Error Detection And Correction                                                                                                                                                                             |
| 82068137     | Granted   | 6408416       | 6/16/1999   | 6/18/2002  | 09/335312          | US | DATA WRITING TO DATA STORAGE MEDIUM                                                                                                                                                                        |
| 82068155     | Granted   | 6307692       | 5/18/1999   | 10/23/2001 | 09/313453          | US | DOUBLE PULSE WRITE DRIVER                                                                                                                                                                                  |
| 82068161     | Granted   | 6256158       | 5/12/1999   | 7/3/2001   | 09/311481          | US | CALIBRATING WRITE PRE-EQUALISATION IN A DATA STORAGE DEVICE                                                                                                                                                |
| 82068347     | Granted   | 6212035       | 7/29/1999   | 4/3/2001   | 09/363030          | US | MAGNETIC TAPE APPARATUS HAVING A MULTI-FUNCTION MOTOR WHICH DRIVES A HELICAL SCANNING DRUM CLEANING ASSEMBLY                                                                                               |
| 82068413     | Granted   | 6510532       | 10/14/1999  | 1/21/2003  | 09/417574          | US | BUS AND/OR INTERFACE LOCAL CAPTURE MODULE FOR DIAGNOSTIC ANALYSER                                                                                                                                          |
| 82068476     | Granted   | 6330570       | 2/26/1999   | 12/11/2001 | 09/259129          | US | DATA BACKUP SYSTEM                                                                                                                                                                                         |
| 82068527     | Granted   | 6507841       | 2/19/1999   | 1/14/2003  | 09/252671          | US | METHOD OF AND APPARATUS FOR REFINING DESCRIPTORS                                                                                                                                                           |
| 82068782     | Granted   | 6640326       | 5/30/2000   | 10/28/2003 | 09/580453          | US | Data Set Recovery By Codeword Overlay                                                                                                                                                                      |
| 82069097     | Granted   | 6704732       | 1/24/2000   | 3/9/2004   | 09/490784          | US | Website Usage Monitoring                                                                                                                                                                                   |
| 82069286     | Granted   | 8407092       | 10/30/2001  | 3/26/2013  | 10/415449          | US | Metering In A Data Processing System                                                                                                                                                                       |
| 82069352     | Granted   | 6728860       | 2/19/2001   | 4/27/2004  | 09/959590          | US | Address Mapping In Solid State Storage Device                                                                                                                                                              |
| 82069394     | Granted   | 6778506       | 4/27/2000   | 8/17/2004  | 09/561510          | US | Loop Prevention In Networks                                                                                                                                                                                |
| 82070522     | Granted   | 7150023       | 7/27/2001   | 12/12/2006 | 09/915404          | US | Dynamic Resource Control In A Processing System                                                                                                                                                            |
| 82070699     | Granted   | 6951023       | 10/29/2001  | 9/27/2005  | 10/032883          | US | Message-Based Software System                                                                                                                                                                              |
| 82070957     | Granted   | 6839780       | 1/21/2003   | 1/4/2005   | 10/350299          | US | CONNECTION DEVICE FOR A COMPUTER                                                                                                                                                                           |
| 82071017     | Granted   | 6952731       | 8/14/2001   | 10/4/2005  | 09/929839          | US | Remote Control Of A Device Over The Internet                                                                                                                                                               |
| 82071038     | Published |               | 6/7/2002    |            | 10/165863          | US | Providing Access To Diagnostic Information To An Interested Party, Such As A Computer Remote Support Agent                                                                                                 |
| 82071074     | Granted   | 8208895       | 6/20/2002   | 6/26/2012  | 10/175284          | US | A Telecommunications System, A Method Of Charging Some Or All Of The Cost Of A Call To A Callee, A Method Of Debiting A Prepay Account Of A Telecommunications Subscriber And Telecommunications Apparatus |
| 82071089     | Granted   | 7292686       | 9/5/2002    | 11/6/2007  | 10/236462          | US | Exchange Node                                                                                                                                                                                              |
| 82071326     | Granted   | 7213070       | 1/21/2003   | 5/1/2007   | 10/349500          | US | Method Of Brokering Network Services                                                                                                                                                                       |
| 82071347     | Granted   | 7296050       | 1/17/2003   | 11/13/2007 | 10/347115          | US | Distributed Computing System And Method                                                                                                                                                                    |
| 82071890     | Granted   | 6804247       | 5/30/2000   | 10/12/2004 | 09/580603          | US | System Providing For Multiple Virtual Circuits Between Two Network Entities                                                                                                                                |

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| 82071893     | Granted | 6222842       | 9/30/1997   | 4/24/2001  | 08/940260          | US | System Providing For Multiple Virtual Circuits Between Top Network Entities                                                                                              |
| 82072019     | Granted | 6173343       | 9/18/1998   | 1/9/2001   | 09/156217          | US | DATA PROCESSING SYSTEM AND METHOD WITH SYSTEM DETERMINED PERIPHERAL DEVICE SERVICE                                                                                       |
| 82072100     | Granted | 6891863       | 10/6/2000   | 5/10/2005  | 09/684845          | US | Device And Methods For Processing Channels In A Data Stream                                                                                                              |
| 82075388     | Granted | 7073093       | 5/15/2001   | 7/4/2006   | 09/858105          | US | HELPPDESK SYSTEM AND METHOD                                                                                                                                              |
| 82076567     | Granted | 5838976       | 11/28/1995  | 11/17/1998 | 08/563334          | US | System And Method For Profiling Code On Symmetric Multiprocessor Architectures                                                                                           |
| 82077029     | Granted | 5828840       | 8/6/1996    | 10/27/1998 | 08/692489          | US | SERVER FOR STARTING CLIENT APPLICATION ON CLIENT IF CLIENT IS NETWORK TERMINAL AND INITIATING CLIENT APPLICATION ON SERVER IF CLIENT IS NON NETWORK TERMINAL             |
| 82077131     | Granted | 5850446       | 6/17/1996   | 12/15/1998 | 08/664825          | US | System, Method And Article Of Manufacture For Virtual Point Of Sale Processing Utilizing An Extensible, Flexible Architecture                                            |
| 82077149     | Granted | 6324525       | 7/22/1998   | 11/27/2001 | 09/121559          | US | SETTLEMENT OF AGGREGATED ELECTRONIC TRANSACTIONS OVER A NETWORK                                                                                                          |
| 82077335     | Granted | 5963924       | 4/26/1996   | 10/5/1999  | 08/638550          | US | A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR THE USE OF PAYMENT INSTRUMENT HOLDERS AND PAYMENT INSTRUMENTS IN NETWORK ELECTRONIC COMMERCE                             |
| 82077338     | Granted | 5987140       | 4/26/1996   | 11/16/1999 | 08/639909          | US | System, Method And Article Of Manufacture For Secure Network Electronic Payment And Credit Collection                                                                    |
| 82077380     | Granted | 5943424       | 6/17/1996   | 8/24/1999  | 08/664772          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR PROCESSING A PLURALITY OF TRANSACTIONS FROM A SINGLE INITIATION POINT ON A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE |
| 82077386     | Granted | 6026379       | 6/17/1996   | 36571      | 08/664634          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR MANAGING TRANSACTIONS IN A HIGH AVAILABILITY SYSTEM                                                                        |
| 82077398     | Granted | 6363363       | 8/24/1999   | 3/26/2002  | 09/382718          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR MANAGING TRANSACTIONS IN A HIGH AVAILABILITY SYSTEM                                                                        |
| 82077404     | Granted | 6002767       | 6/17/1996   | 12/14/1999 | 08/668011          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A MODULAR GATEWAY SERVER ARCHITECTURE                                                                                      |
| 82077407     | Granted | 6072870       | 6/17/1996   | 6/6/2000   | 08/664633          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A GATEWAY PAYMENT ARCHITECTURE UTILIZING A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE                                 |

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| 82077449     | Granted | 6253027       | 6/17/1996   | 6/26/2001  | 08/664814          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR EXCHANGING SOFTWARE AND CONFIGURATION DATA OVER A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE                                                 |
| 82077452     | Granted | 5987132       | 6/17/1996   | 11/16/1999 | 08/664835          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR CONDITIONALLY ACCEPTING A PAYMENT METHOD UTILIZING AN EXTENSIBLE, FLEXIBLE ARCHITECTURE                                                           |
| 82077458     | Granted | 5889863       | 6/17/1996   | 3/30/1999  | 08/664824          | US | System, Method And Article Of Manufacture For Remote Virtual Point Of Sale Processing Utilizing A Multichannel, Extensible, Flexible Architecture                                               |
| 82077506     | Granted | 6373950       | 6/17/1996   | 4/16/2002  | 08/664864          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR TRANSMITTING MESSAGES WITHIN MESSAGES UTILIZING AN EXTENSIBLE, FLEXIBLE ARCHITECTURE                                                              |
| 82077524     | Granted | 5978840       | 9/26/1996   | 11/2/1999  | 08/721133          | US | A SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR A PAYMENT GATEWAY SYSTEM ARCHITECTURE FOR PROCESSING ENCRYPTED PAYMENT TRANSACTIONS UTILIZING A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE |
| 82078256     | Granted | 5999930       | 8/1/1997    | 12/7/1999  | 08/905307          | US | Method And Apparatus For Distributed Control Of A Shared Storage Volume                                                                                                                         |
| 82078262     | Granted | 6067545       | 4/15/1998   | 5/23/2000  | 09/060857          | US | RESOURCE REBALANCING IN NETWORKED COMPUTER SYSTEMS                                                                                                                                              |
| 82078265     | Granted | 6101508       | 4/15/1998   | 8/8/2000   | 09/060924          | US | Clustered File Management For Network Resources                                                                                                                                                 |
| 82078340     | Granted | 6044367       | 4/15/1998   | 3/28/2000  | 09/060864          | US | Distributed I/O Store                                                                                                                                                                           |
| 82078343     | Granted | 6185601       | 4/15/1998   | 2/6/2001   | 09/060869          | US | DYNAMIC LOAD BALANCING OF A NETWORK OF CLIENT AND SERVER COMPUTERS                                                                                                                              |
| 82079000     | Granted | 6795910       | 10/9/2001   | 9/21/2004  | 09/973665          | US | Stack Utilization Management System And Method For A Two-Stack Arrangement                                                                                                                      |
| 82079003     | Granted | 7165087       | 12/17/2002  | 1/16/2007  | 10/322200          | US | SYSTEM AND METHOD FOR INSTALLING AND CONFIGURING COMPUTING AGENTS                                                                                                                               |
| 82079021     | Granted | 7765299       | 9/16/2002   | 7/27/2010  | 10/245669          | US | Dynamic Adaptive Server Provisioning For Blade Architectures                                                                                                                                    |
| 82079255     | Granted | 8341211       | 9/14/2007   | 12/25/2012 | 11/855348          | US | System And Method For Inquiry Caching In A Storage Area Network                                                                                                                                 |
| 82079258     | Granted | 7904539       | 3/13/2009   | 3/8/2011   | 12/403971          | US | System And Method For Servicing Inquiry Commands About Target Devices In Storage Area Network                                                                                                   |
| 82079381     | Granted | 6910271       | 10/29/2002  | 6/28/2005  | 10/283907          | US | Mechanical Highly Compliant Thermal Interface Pad                                                                                                                                               |
| 82079387     | Granted | 7131199       | 2/1/2005    | 11/7/2006  | 11/049346          | US | Mechanical Highly Compliant Thermal Interface Pad                                                                                                                                               |
| 82079405     | Granted | 7236967       | 6/3/2002    | 6/26/2007  | 10/161369          | US | METHODS AND SYSTEMS FOR MAINTAINING TRANSACTION SEMANTICS IN A COMPUTER SYSTEM                                                                                                                  |

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| 82079963     | Granted | 7019973       | 6/9/2004    | 3/28/2006  | 10/864165 US       |    | Circuit Cooling Apparatus                                                                                                                    |
| 82080209     | Granted | 8463617       | 6/3/2003    | 6/11/2013  | 10/453068 US       |    | Network Subscriber Usage Recording System                                                                                                    |
| 82080215     | Granted | 6895534       | 10/26/2001  | 5/17/2005  | 10/008855 US       |    | Systems And Methods For Providing Automated Diagnostic Services For A Cluster Computer System                                                |
| 82080398     | Granted | 6586965       | 10/29/2001  | 7/1/2003   | 10/016593 US       |    | Molecular Crossbar Latch                                                                                                                     |
| 82080653     | Granted | 6912635       | 5/8/2002    | 6/28/2005  | 10/140968 US       |    | Distributing Workload Evenly Across Storage Media In A Storage Array                                                                         |
| 82080824     | Granted | 8219777       | 10/3/2002   | 7/10/2012  | 10/264659 US       |    | Virtual Storage Systems, Virtual Storage Methods, And Methods Of Over Committing A Virtual RAID Storage System                               |
| 82080875     | Granted | 6996582       | 10/3/2002   | 2/7/2006   | 10/264525 US       |    | Virtual Storage Systems And Virtual Storage System Operational Methods                                                                       |
| 82080881     | Granted | 6857057       | 10/3/2002   | 2/15/2005  | 10/264661 US       |    | Virtual Storage Systems And Virtual Storage System Operational Methods                                                                       |
| 82081004     | Granted | 6959370       | 1/3/2003    | 10/25/2005 | 10/336430 US       |    | System And Method For Migrating Data Between Memories                                                                                        |
| 82081010     | Granted | 7240174       | 7/29/2005   | 7/3/2007   | 11/193215 US       |    | System And Method For Migrating Data Between Memories                                                                                        |
| 82081016     | Granted | 6826922       | 10/31/2003  | 12/7/2004  | 10/697972 US       |    | Cooling System                                                                                                                               |
| 82081019     | Granted | 6817199       | 10/31/2003  | 11/16/2004 | 10/697691 US       |    | Cooling System                                                                                                                               |
| 82081022     | Granted | 6886353       | 10/31/2003  | 5/3/2005   | 10/697699 US       |    | Cooling System                                                                                                                               |
| 82081025     | Granted | 6854287       | 10/31/2003  | 2/15/2005  | 10/697697 US       |    | Cooling System                                                                                                                               |
| 82081028     | Granted | 6963970       | 4/29/2002   | 11/8/2005  | 10/136580 US       |    | System And Method For Executing A Fast Reset Of A Computer System                                                                            |
| 82081070     | Granted | 8271897       | 5/24/2005   | 9/18/2012  | 11/135507 US       |    | Method And System For Navigating A User Dialog Configured To Accomplish A Task                                                               |
| 82081190     | Granted | 7839782       | 4/1/2004    | 11/23/2010 | 10/814224 US       |    | Method And System Of Managing Traffic In A First Set Of Nodes Of A Computer Network                                                          |
| 82081193     | Granted | 8046471       | 9/19/2002   | 10/25/2011 | 10/247363 US       |    | Regressive Transport Message Delivery System And Method                                                                                      |
| 82081211     | Granted | 6711730       | 5/13/2002   | 3/23/2004  | 10/179077 US       |    | Synthesizing Signal Net Information From Multiple Integrated Circuit Package Models                                                          |
| 82081502     | Granted | 8392499       | 5/16/2002   | 3/5/2013   | 10/146988 US       |    | System And Method For Relating Aborted Client Accesses Of Data To Quality Of Service Provided By A Server In A Client-server Network         |
| 82081694     | Granted | 7287247       | 11/12/2002  | 10/23/2007 | 10/293626 US       |    | Instrumenting A Software Application That Includes Distributed Object Technology                                                             |
| 82082201     | Granted | 7266099       | 1/23/2002   | 9/4/2007   | 10/056294 US       |    | METHOD FOR HAND-OFF OF A DATA SESSION                                                                                                        |
| 82082267     | Granted | 6853554       | 12/14/2001  | 2/8/2005   | 10/022112 US       |    | Thermal Connection Layer                                                                                                                     |
| 82082270     | Granted | 7043650       | 10/31/2001  | 5/9/2006   | 10/000703 US       |    | System And Method For Intelligent Control Of Power Consumption Of Distributed Services During Periods When Power Consumption Must Be Reduced |

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| 82082273     | Granted   | 6957353       | 10/31/2001  | 10/18/2005 | 10/032942          | US | SYSTEM AND METHOD FOR PROVIDING MINIMAL POWER CONSUMING REDUNDANT COMPUTING HARDWARE FOR DISTRIBUTED SERVICES             |
| 82082375     | Granted   | 7254562       | 7/11/2002   | 8/7/2007   | 10/192948          | US | Rule-based Packet Selection, Storage, And Access Method And System                                                        |
| 82082450     | Granted   | 7224891       | 2/13/2002   | 5/29/2007  | 10/074734          | US | Digital Photograph Presentation Using DVD Players                                                                         |
| 82082453     | Published |               | 5/28/2002   |            | 10/157661          | US | A Method And System For Customizing The Content Of Targeted Advertising                                                   |
| 82082456     | Granted   | 7378347       | 10/28/2002  | 5/27/2008  | 10/281678          | US | METHOD OF FORMING CATALYST NANOPARTICLES FOR NANOWIRE GROWTH AND OTHER APPLICATIONS                                       |
| 82082564     | Granted   | 7028314       | 3/24/2003   | 4/11/2006  | 10/396011          | US | Media Storage System And Method For Identifying A Storage Location Therein                                                |
| 82082582     | Granted   | 7573827       | 5/6/2003    | 8/11/2009  | 10/430668          | US | METHOD AND APPARATUS FOR DETECTING NETWORK CONGESTION                                                                     |
| 82082690     | Granted   | 7190669       | 7/9/2002    | 3/13/2007  | 10/192453          | US | System, Method And Computer Readable Medium For Flow Control Of Data Traffic                                              |
| 82082696     | Granted   | 7322034       | 6/14/2002   | 1/22/2008  | 10/170642          | US | Method And System For Dynamically Allocating Computer System Resources                                                    |
| 82082702     | Granted   | 6704909       | 6/19/2002   | 3/9/2004   | 10/176424          | US | Reduction Of Storage Elements In Synthesized Synchronous Circuits                                                         |
| 82082711     | Granted   | 7301660       | 2/20/2003   | 11/27/2007 | 10/370016          | US | Systems And Methods For Remote Testing Of Printing Devices                                                                |
| 82082891     | Granted   | 6859214       | 11/20/2001  | 2/22/2005  | 09/988969          | US | USER INTERFACE MECHANISM FOR MANIPULATING CONTEXT IN COMPUTER MANAGEMENT APPLICATIONS                                     |
| 82082894     | Granted   | 6744332       | 6/21/2002   | 6/1/2004   | 10/176833          | US | Four-Drop Bus With Matched Response                                                                                       |
| 82082900     | Granted   | 7085884       | 6/30/2003   | 8/1/2006   | 10/611597          | US | System And Method For Storing Operational Data Of A Storage Automation Device To A Removable Nonvolatile Memory Component |
|              |           |               |             |            |                    |    |                                                                                                                           |
| 82083191     | Granted   | 6758679       | 4/17/2002   | 7/6/2004   | 10/124999          | US | INSTALLATION INSTRUCTION CONVEYING DEVICE                                                                                 |
| 82083203     | Granted   | 6894900       | 9/17/2002   | 5/17/2005  | 10/246322          | US | Heat Sink With Heat Pipe And Base Fins                                                                                    |
| 82083275     | Granted   | 6644480       | 1/30/2002   | 11/11/2003 | 10/060574          | US | Adjustable Rackmount Assembly With Locking Key                                                                            |
| 82083497     | Granted   | 6728101       | 8/29/2002   | 4/27/2004  | 10/230754          | US | Card Support Assembly                                                                                                     |
| 82083506     | Granted   | 7249345       | 2/28/2002   | 7/24/2007  | 10/086939          | US | Method And System For Automatically Generating Source Code Based On A Mark-up Language Message Definition                 |
| 82083581     | Granted   | 6937238       | 3/20/2003   | 8/30/2005  | 10/392646          | US | System For Visualizing Massive Web Transaction Data Sets Without Overlapping                                              |
| 82083584     | Granted   | 6815750       | 5/22/2002   | 38300      | 10/155416          | US | FIELD EFFECT TRANSISTOR WITH CHANNEL EXTENDING THROUGH LAYERS ON A SUBSTRATE                                              |
| 82083587     | Granted   | 6806141       | 10/30/2003  | 10/19/2004 | 10/696838          | US | FIELD EFFECT TRANSISTOR WITH GATE LAYER AND METHOD OF MAKING SAME                                                         |

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| 82083770     | Granted | 7516362       | 3/19/2004   | 4/7/2009   | 10/804275          | US | METHOD AND APPARATUS FOR AUTOMATING THE ROOT CAUSE ANALYSIS OF SYSTEM FAILURES                                                     |
| 82083773     | Granted | 7502803       | 5/28/2003   | 3/10/2009  | 10/446950          | US | System And Method For Generating ACPI Machine Language Tables                                                                      |
| 82083824     | Granted | 6901344       | 2/11/2003   | 5/31/2005  | 10/364858          | US | Apparatus And Method For Verification Of System Interconnect Upon Hot-plugging Of Electronic Field Replaceable Units               |
| 82084061     | Granted | 7065691       | 5/19/2003   | 6/20/2006  | 10/440890          | US | Apparatus And Method For Saving Precise System State Following Exceptions                                                          |
| 82084067     | Granted | 6807079       | 11/1/2002   | 10/19/2004 | 10/285802          | US | Device Having A State Dependent Upon The State Of Particles Dispersed In A Carrier                                                 |
| 82084247     | Granted | 6858162       | 4/1/2002    | 2/22/2005  | 10/114410          | US | SINGLE MOLECULE REALIZATION OF THE SWITCH AND DOIDE COMBINATION                                                                    |
| 82084253     | Granted | 7644006       | 7/22/2002   | 1/5/2010   | 10/200306          | US | Semantically Investigating Business Processes                                                                                      |
| 82084271     | Granted | 7516917       | 6/14/2004   | 4/14/2009  | 10/867024          | US | Management Device For Excess Cabling                                                                                               |
| 82084328     | Granted | 7114555       | 5/31/2002   | 10/3/2006  | 10/157892          | US | Controlled Cooling Of A Data Center                                                                                                |
| 82084436     | Granted | 7155721       | 6/28/2002   | 12/26/2006 | 10/183563          | US | Method And Apparatus For Communicating Information Between Lock Stepped Processors                                                 |
| 82084442     | Granted | 7725899       | 11/14/2006  | 5/25/2010  | 11/598781          | US | Method And Apparatus For Communicating Information Between Lock Stepped Processors                                                 |
| 82084445     | Granted | 7808794       | 3/31/2003   | 10/5/2010  | 10/403358          | US | Media Storage Systems And Control Panel For Use Therewith                                                                          |
| 82084451     | Granted | 6707675       | 12/18/2002  | 3/16/2004  | 10/323245          | US | EMI Containment Device And Method                                                                                                  |
| 82084514     | Granted | 8181125       | 8/5/2002    | 5/15/2012  | 10/212360          | US | System And Method For Providing Compliant Mapping Between Chip Bond Locations And Package Bond Locations For An Integrated Circuit |
| 82084706     | Granted | 6745363       | 2/19/2002   | 6/1/2004   | 10/079451          | US | Early Error Detection Using ECC                                                                                                    |
| 82084937     | Granted | 7346657       | 1/15/2003   | 3/18/2008  | 10/345028          | US | Method And System For Visually Displaying And Navigating Virtual Discussion Groups                                                 |
| 82084949     | Granted | 8621083       | 5/15/2003   | 12/31/2013 | 10/439417          | US | System And Method For Multicasting Through A Localized Computer Network                                                            |
| 82084955     | Granted | 6922336       | 4/11/2003   | 7/26/2005  | 10/411699          | US | Pivoted Field Replaceable Unit Apparatus And Method                                                                                |
| 82084958     | Granted | 6788344       | 4/11/2003   | 9/7/2004   | 10/411671          | US | Field Replaceable Unit Access Device And Method                                                                                    |
| 82084961     | Granted | 6816809       | 7/23/2002   | 11/9/2004  | 10/200175          | US | Hardware Based Utilization Metering                                                                                                |
| 82084994     | Granted | 6891347       | 10/9/2002   | 5/10/2005  | 10/267766          | US | Cooling Fan Control Based On Cabinet Intrusion                                                                                     |
| 82085201     | Granted | 6956715       | 3/17/2003   | 10/18/2005 | 10/389833          | US | High-density Media Storage System                                                                                                  |
| 82085243     | Granted | 6749447       | 7/9/2002    | 6/15/2004  | 10/192462          | US | METHODS AND DEVICES FOR PROTECTING PINS OF A PIN CONNECTOR                                                                         |
| 82085249     | Granted | 6856409       | 7/9/2002    | 2/15/2005  | 10/192270          | US | Tool And Method For Evaluating A Pin Connector                                                                                     |

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| 82085375     | Granted   | 7219230       | 5/8/2002    | 5/15/2007  | 10/140058          | US | Optimizing Costs Associated With Managing Encrypted Data                                                                         |
| 82085444     | Granted   | 7309875       | 11/22/2004  | 12/18/2007 | 10/995809          | US | Nanocrystal Protective Layer For Crossbar Molecular Electronic Devices                                                           |
| 82085447     | Granted   | 8060643       | 8/30/2002   | 11/15/2011 | 10/233234          | US | Method And Apparatus For Dynamically Managing Bandwidth For Clients In A Storage Area Network                                    |
| 82085705     | Granted   | 8667103       | 4/26/2002   | 3/4/2014   | 10/133617          | US | System And Method For Message Traffic Analysis, Categorization And Reporting, Within A System For Harvesting Community Knowledge |
| 82085708     | Granted   | 7360044       | 7/20/2004   | 4/15/2008  | 10/896100          | US | Storage System With Primary Mirror Shadow                                                                                        |
| 82085771     | Granted   | 7512066       | 3/30/2004   | 3/31/2009  | 10/814073          | US | CONGESTION CONTROL SYSTEM                                                                                                        |
| 82085816     | Published |               | 7/30/2002   |            | 10/209374          | US | Method And System For Storing Sparse Data In Memory And Accessing Stored Sparse Data                                             |
| 82085873     | Granted   | 7519800       | 3/27/2003   | 4/14/2009  | 10/400856          | US | Apparatus And Method For Enforcing Homogeneity Within Partitions Of Heterogeneous Computer Systems                               |
| 82085999     | Granted   | 6820027       | 11/1/2002   | 11/16/2004 | 10/285774          | US | System And Method For Generating A SHMOO Plot By Avoiding Testing In Failing Regions                                             |
| 82086020     | Granted   | 6613984       | 4/29/2002   | 9/2/2003   | 10/135165          | US | MEANS AND METHODS OF INSULATING A BOLSTER PLATE                                                                                  |
| 82086311     | Granted   | 7225118       | 10/31/2002  | 5/29/2007  | 10/284098          | US | Global Data Placement                                                                                                            |
| 82086503     | Granted   | 6952358       | 5/5/2003    | 10/4/2005  | 10/429421          | US | Molecular Wire Content Addressable Memory                                                                                        |
| 82086629     | Granted   | 6775997       | 10/3/2002   | 8/17/2004  | 10/262879          | US | Cooling Of Data Centers                                                                                                          |
| 82086632     | Granted   | 6772604       | 10/31/2003  | 8/10/2004  | 10/697693          | US | Cooling Of Data Centers                                                                                                          |
| 82086635     | Granted   | 6832489       | 10/31/2003  | 12/21/2004 | 10/697694          | US | Cooling Of Data Centers                                                                                                          |
| 82086638     | Granted   | 6854284       | 10/31/2003  | 2/15/2005  | 10/697689          | US | Cooling Of Data Centers                                                                                                          |
| 82086641     | Granted   | 6832490       | 10/31/2003  | 12/21/2004 | 10/697698          | US | Cooling Of Data Centers                                                                                                          |
| 82086644     | Granted   | 6834512       | 10/31/2003  | 12/28/2004 | 10/697659          | US | Cooling Of Data Centers                                                                                                          |
| 82086647     | Granted   | 6868683       | 10/31/2003  | 3/22/2005  | 10/697690          | US | Cooling Of Data Centers                                                                                                          |
| 82086680     | Granted   | 6812719       | 5/28/2003   | 11/2/2004  | 10/447798          | US | Electronic Probe With A Tip That Is Securable To An Electronic Device                                                            |
| 82086692     | Granted   | 7376733       | 2/3/2003    | 5/20/2008  | 10/357092          | US | METHOD AND APPARATUS AND PROGRAM FOR SCHEDULING AND EXECUTING EVENTS IN REAL TIME OVER A NETWORK                                 |
| 82086695     | Granted   | 7386610       | 9/18/2000   | 6/10/2008  | 09/664499          | US | Internet Protocol Data Mirroring                                                                                                 |
| 82087019     | Granted   | 7292972       | 1/30/2003   | 11/6/2007  | 10/354379          | US | System And Method For Combining Text Summarizations                                                                              |
| 82087187     | Granted   | 6873190       | 3/18/2003   | 38440      | 10/392062          | US | Apparatus For Sensing The Presence Of An Inductive Load Driven By A Pulse Width Modulated Signal                                 |
| 82087196     | Granted   | 6924777       | 3/17/2003   | 8/2/2005   | 10/391125          | US | Enhanced Antenna Using Flexible Circuitry                                                                                        |
| 82087247     | Granted   | 6907314       | 9/16/2003   | 6/14/2005  | 10/665131          | US | Inventory Control Device                                                                                                         |
| 82087256     | Granted   | 7437451       | 5/16/2002   | 10/14/2008 | 10/147249          | US | System And Method For Collecting Desired Information For Network Transactions At The Kernel Level                                |

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| 82087745     | Granted | 7454520       | 11/20/2002  | 11/18/2008 | 10/299908          | US | Method And Apparatus For Generating A Routing Table                                                                            |
| 82087748     | Granted | 7554988       | 9/10/2002   | 6/30/2009  | 10/237618          | US | Creating Expressway For Overlay Routing                                                                                        |
| 82087751     | Granted | 7289520       | 11/20/2002  | 10/30/2007 | 10/299907          | US | Method, Apparatus, And System For Expressway Routing                                                                           |
| 82087757     | Granted | 6985928       | 10/1/2002   | 1/10/2006  | 10/260431          | US | Among Peers                                                                                                                    |
| 82087760     | Granted | 7555553       | 10/1/2002   | 6/30/2009  | 10/260430          | US | Placing An Object At A Node In A Peer-to-Peer System Based On A Zoom-in Algorithm                                              |
| 82087874     | Granted | 7024758       | 5/28/2003   | 4/11/2006  | 10/447343          | US | Placing An Object At A Node In A Peer-to-Peer System Based On Storage Utilization                                              |
| 82087886     | Granted | 7229050       | 11/27/2002  | 6/12/2007  | 10/306132          | US | Assembly For Aligning A Component                                                                                              |
| 82087946     | Granted | 7009989       | 3/5/2002    | 3/7/2006   | 10/091874          | US | Raceway System                                                                                                                 |
| 82087949     | Granted | 7363392       | 7/30/2003   | 4/22/2008  | 10/630067          | US | Forwarding Ordered Data Packets With Less Delay                                                                                |
| 82087955     | Granted | 7870312       | 3/12/2008   | 1/11/2011  | 12/047254          | US | AUTOMATIC MAINTENANCE OF CONFIGURATION                                                                                         |
| 82087994     | Granted | 6922456       | 3/25/2002   | 7/26/2005  | 10/106536          | US | INFORMATION IN A REPLACEABLE ELECTRONIC MODULE                                                                                 |
| 82088003     | Granted | 7513779       | 6/4/2003    | 4/7/2009   | 10/455638          | US | COUNTER SYSTEM AND METHOD                                                                                                      |
| 82088063     | Granted | 7233598       | 3/5/2002    | 6/19/2007  | 10/091775          | US | Connector Having A Bypass Capacitor And Method For Reducing The Impedance And Length Of A Return-signal Path                   |
| 82088069     | Granted | 8051089       | 4/30/2003   | 11/1/2011  | 10/427572          | US | System And Method For Speculatively Issuing Memory Requests While Maintaining A Specified Packet Order                         |
| 82088120     | Granted | 7310773       | 1/13/2003   | 12/18/2007 | 10/346795          | US | Systems And Methods For Location-based Real Estate Services                                                                    |
| 82088135     | Granted | 7021895       | 11/13/2002  | 4/4/2006   | 10/292989          | US | Removal Of Extraneous Text From Electronic Documents                                                                           |
| 82088138     | Granted | 6760245       | 5/1/2002    | 7/6/2004   | 10/138076          | US | Fan Module With Integrated Diffuser                                                                                            |
| 82088270     | Granted | 7242690       | 3/5/2002    | 7/10/2007  | 10/091837          | US | Molecular Wire Crossbar Flash Memory                                                                                           |
| 82088333     | Granted | 8412808       | 8/21/2002   | 4/2/2013   | 10/225785          | US | SYSTEM FOR PERFORMING INPUT PROCESSING ON A DATA PACKET                                                                        |
| 82088642     | Granted | 7058828       | 8/12/2002   | 6/6/2006   | 10/216437          | US | Method And Framework For Server-based Remote Support Delivery                                                                  |
| 82088681     | Granted | 6829150       | 7/9/2002    | 12/7/2004  | 10/192172          | US | System, Method And Apparatus For The Frequency Management Of Blades In A Bladed Architecture Based On Performance Requirements |
| 82088690     | Granted | 6827595       | 7/9/2002    | 12/7/2004  | 10/192400          | US | Ejector Latch Indicator Light                                                                                                  |
| 82088699     | Granted | 7979632       | 9/6/2002    | 7/12/2011  | 10/235924          | US | Ejector Latch Connector                                                                                                        |
| 82088894     | Granted | 6925409       | 10/3/2002   | 8/2/2005   | 10/264022          | US | A Storage System Including A Fast Storage Device For Storing Redundant Data                                                    |
| 82088933     | Granted | 7793879       | 4/6/2007    | 9/14/2010  | 11/697303          | US | System And Method For Protection Of Active Files During Extreme Conditions                                                     |
|              |         |               |             |            |                    |    | Apparatus And Method For Reversing Tapewind Direction                                                                          |

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| 82088945     | Granted | 7116522       | 5/19/2003   | 10/3/2006  | 10/440573          | US | System And Method Related To A Flexible Circuit                                                                                              |
| 82088996     | Granted | 6631756       | 9/10/2002   | 10/14/2003 | 10/238144          | US | High Performance Passive Cooling Device With Ducting                                                                                         |
| 82089116     | Granted | 7747339       | 10/3/2002   | 6/29/2010  | 10/264474          | US | Managing Procurement Risk                                                                                                                    |
| 82089131     | Granted | 6944552       | 6/25/2003   | 9/13/2005  | 10/606134          | US | System And Method For Detecting Power Deficiencies In Computer Component                                                                     |
| 82089200     | Granted | 7548971       | 8/12/2002   | 6/16/2009  | 10/216229          | US | System And Method For Managing The Operating Frequency Of Blades In A Bladed-system                                                          |
| 82089263     | Granted | 6616525       | 4/29/2002   | 9/9/2003   | 10/135942          | US | Modular Fan System                                                                                                                           |
| 82089266     | Granted | 6896611       | 6/30/2003   | 5/24/2005  | 10/610772          | US | Modular Fan System                                                                                                                           |
| 82089518     | Granted | 8185663       | 5/11/2004   | 5/22/2012  | 10/844478          | US | Mirroring Storage Interface                                                                                                                  |
| 82089614     | Granted | 6993639       | 4/1/2003    | 1/31/2006  | 10/405170          | US | PROCESSING INSTRUCTION ADDRESSED BY RECEIVED REMOTE INSTRUCTION AND GENERATING REMOTE INSTRUCTION TO RESPECTIVE OUTPUT PORT FOR ANOTHER CELL |
| 82089992     | Granted | 8258801       | 3/5/2009    | 9/4/2012   | 12/380910          | US | Nanoscale Multiplexer                                                                                                                        |
| 82090061     | Granted | 7886430       | 12/13/2002  | 2/15/2011  | 10/318856          | US | METHOD OF INSTALLING CIRCUIT BOARD COMPONENT                                                                                                 |
| 82090130     | Granted | 6774446       | 10/31/2002  | 8/10/2004  | 10/284183          | US | Efficient Spin-Injection Into Semiconductors                                                                                                 |
| 82090133     | Granted | 6809388       | 10/31/2002  | 10/26/2004 | 10/284360          | US | MAGNETIC SENSOR BASED ON EFFICIENT SPIN INJECTION INTO SEMICONDUCTORS                                                                        |
| 82090187     | Granted | 7149919       | 5/15/2003   | 12/12/2006 | 10/440209          | US | Disaster Recovery System With Cascaded Resynchronization                                                                                     |
| 82090199     | Granted | 7240500       | 9/17/2003   | 7/10/2007  | 10/664256          | US | Dynamic Fluid Sprayjet Delivery System                                                                                                       |
| 82090310     | Granted | 7568023       | 12/24/2002  | 7/28/2009  | 10/327035          | US | Method, System, And Data Structure For Monitoring Transaction Performance In A Managed Computer Network Environment                          |
| 82090385     | Granted | 8386389       | 4/30/2002   | 2/26/2013  | 10/135720          | US | Service Delivery Systems And Methods                                                                                                         |
| 82090439     | Granted | 7483897       | 12/3/2002   | 1/27/2009  | 10/308761          | US | System And Method For Harvesting Of Data From Peripheral Devices                                                                             |
| 82090577     | Granted | 7143413       | 5/15/2002   | 11/28/2006 | 10/144991          | US | Method And System For Allocating System Resources Among Applications Using Weights                                                           |
| 82090688     | Granted | 7000141       | 11/14/2001  | 2/14/2006  | 10/295554          | US | Data Placement For Fault Tolerance                                                                                                           |
| 82090703     | Granted | 6917993       | 5/23/2003   | 7/12/2005  | 10/445072          | US | Modular Storage Library With Automatic Configuration                                                                                         |
| 82090754     | Granted | 7512703       | 1/31/2003   | 3/31/2009  | 10/355118          | US | Method Of Storing Data Concerning A Computer Network                                                                                         |
| 82091258     | Granted | 7483875       | 1/24/2003   | 1/27/2009  | 10/350327          | US | Single System For Managing Multi-platform Data Retrieval                                                                                     |
| 82091264     | Granted | 7904432       | 1/24/2003   | 3/8/2011   | 10/350356          | US | Compressed Data Structure For Extracted Changes To A Database And Method Of Generating The Data Structure                                    |
| 82091300     | Granted | 6744632       | 9/20/2002   | 6/1/2004   | 10/251525          | US | Composite Construction Baffle For Modular Electronic Systems                                                                                 |
| 82091363     | Granted | 7380081       | 6/6/2003    | 5/27/2008  | 10/456345          | US | Asynchronous Data Redundancy Technique                                                                                                       |

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| 82091372     | Granted   | 6896541       | 2/18/2003   | 5/24/2005  | 10/369832          | US | Interface Connector That Enables Detection Of Cable Connection                                                                               |
| 82091387     | Granted   | 7657533       | 11/26/2003  | 2/2/2010   | 10/723949          | US | Data Management Systems, Data Management System Storage Devices, Articles Of Manufacture, And Data Management Methods                        |
| 82091447     | Granted   | 7437439       | 12/3/2002   | 10/14/2008 | 10/308784          | US | System And Method For The Hybrid Harvesting Of Information From Peripheral Devices                                                           |
| 82091510     | Granted   | 6988224       | 10/31/2002  | 1/17/2006  | 10/284372          | US | Measurement Apparatus                                                                                                                        |
| 82091639     | Granted   | 7356576       | 10/1/2002   | 4/8/2008   | 10/260292          | US | Method, Apparatus, And Computer Readable Medium For Providing Network Storage Assignments                                                    |
| 82091762     | Granted   | 7389599       | 2/12/2003   | 6/24/2008  | 10/365258          | US | System And Method For Providing Access To Equipment Identity Information                                                                     |
| 82091765     | Granted   | D490084       | 2/6/2003    | 5/18/2004  | 29/175633          | US | Bezel                                                                                                                                        |
| 82091825     | Granted   | 8051210       | 10/15/2002  | 11/1/2011  | 10/271516          | US | Server With LAN Switch That Connects Ports Based On Connection Information Received From First And Second Lans                               |
| 82091864     | Granted   | 7055114       | 10/8/2003   | 5/30/2006  | 10/681815          | US | Systems And Processes For Asymmetrically Shrinking A VLSI Layout                                                                             |
| 82092317     | Granted   | 6804781       | 5/12/2003   | 10/12/2004 | 10/435782          | US | System And Method For Security Of Information In A Memory                                                                                    |
| 82092563     | Granted   | 8019840       | 10/31/2002  | 9/13/2011  | 10/284966          | US | Storage Area Network Mapping                                                                                                                 |
| 82092686     | Granted   | 6779593       | 4/30/2003   | 8/24/2004  | 10/427670          | US | High Performance Cooling Device With Heat Spreader                                                                                           |
| 82092740     | Published |               | 11/19/2001  |            | 10/495633          | US | Computer-based Transaction Tax Processing System, Service Module, Method And Computer Program Product For Providing Transaction Tax Services |
| 82092758     | Granted   | 8615452       | 3/14/2005   | 12/24/2013 | 11/081069          | US | DATA REPRESENTATION OF TRANSACTION-TAX-RELATED INFORMATION                                                                                   |
| 82093010     | Granted   | 6856518       | 7/14/2003   | 2/15/2005  | 10/619026          | US | Assembly For Supporting A Short Printed Circuit Card                                                                                         |
| 82093061     | Granted   | 7673125       | 6/26/2003   | 3/2/2010   | 10/606462          | US | Resetting Multiple Cells Within A Partition Of A Multiple Partition Computer System                                                          |
| 82093067     | Granted   | 8250373       | 10/29/2008  | 8/21/2012  | 12/260153          | US | AUTHENTICATING AND VERIFYING AN AUTHENTICABLE AND VERIFIABLE MODULE                                                                          |
| 82093367     | Granted   | 7415113       | 7/30/2003   | 8/19/2008  | 10/629599          | US | Management Of Security Key Distribution                                                                                                      |
| 82093373     | Granted   | 7512240       | 10/29/2003  | 3/31/2009  | 10/694824          | US | Management Of Security Key Distribution                                                                                                      |
| 82093430     | Granted   | 7917752       | 8/18/2003   | 3/29/2011  | 10/643306          | US | METHOD OF CONTROLLING THE PROCESSING OF DATA                                                                                                 |
| 82093511     | Granted   | 7451183       | 3/21/2003   | 11/11/2008 | 10/394608          | US | ASSEMBLY AND METHOD FOR BALANCING PROCESSORS IN A PARTITIONED SERVER                                                                         |
| 82093676     | Granted   | 7356813       | 9/26/2002   | 4/8/2008   | 10/255748          | US | System And Method For Optimizing A Program                                                                                                   |
| 82093763     | Granted   | 6877926       | 9/10/2002   | 4/12/2005  | 10/241330          | US | Slide Member Positive Coupling Alignment Assembly                                                                                            |

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|--------------|---------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82094129     | Granted | 6778111       | 9/2/2003    | 8/17/2004  | 10/6553341         | US | MULTI-DIMENSIONAL DEGLITCH FILTER FOR HIGH SPEED DIGITAL SIGNALS                                                                                     |
| 82094180     | Granted | 6880146       | 1/31/2003   | 4/12/2005  | 10/355465          | US | Molecular-Wire-Based Restorative Multiplexer, And Method For Constructing A Multiplexer Based On A Configurable Molecular-Junction-Nanowire Crossbar |
| 82094189     | Granted | 7363312       | 7/3/2003    | 4/22/2008  | 10/613151          | US | Combining Data Descriptions                                                                                                                          |
| 82094192     | Granted | 6898098       | 1/31/2003   | 5/24/2005  | 10/356027          | US | Molecular-Junction-Nanowire-Crossbar-Based Associative Array                                                                                         |
| 82094432     | Granted | 7356215       | 8/23/2003   | 4/8/2008   | 10/646512          | US | Methods And Apparatus For Selectively Coupling Optical Paths                                                                                         |
| 82094513     | Granted | 7444376       | 5/22/2003   | 10/28/2008 | 10/444812          | US | TECHNIQUES FOR CREATING AN ACTIVATION SOLUTION FOR PROVIDING COMMERCIAL NETWORK SERVICES                                                             |
| 82094555     | Granted | 7765284       | 10/24/2002  | 40386      | 10/279531          | US | Dynamically Modified, Multiple-platform Computer Programs, And Methods And Apparatus Utilizing Same                                                  |
| 82094570     | Granted | 7024583       | 10/31/2002  | 4/4/2006   | 10/284255          | US | Method And Apparatus For Detecting File System Corruption                                                                                            |
| 82094612     | Granted | 7047471       | 3/3/2003    | 5/16/2006  | 10/378248          | US | Voltage Margin Testing Of Bladed Servers                                                                                                             |
| 82094615     | Granted | 6711021       | 1/15/2003   | 3/23/2004  | 10/342833          | US | Systems And Methods That Use At Least One Component To Remove The Heat Generated By At Least One Other Component                                     |
| 82094618     | Granted | 6862185       | 11/10/2003  | 3/1/2005   | 10/705557          | US | Systems And Methods That Use At Least One Component To Remove The Heat Generated By At Least One Other Component                                     |
| 82094636     | Granted | 8015279       | 4/26/2006   | 9/6/2011   | 11/410979          | US | Network Analysis                                                                                                                                     |
| 82094924     | Granted | 8051389       | 8/26/2003   | 11/1/2011  | 10/647210          | US | Methods Of Displaying Resources Of Overlapping But Separate Hierarchies                                                                              |
| 82094996     | Granted | 6765295       | 4/23/2003   | 7/20/2004  | 10/421499          | US | Multiplexing System And Method For Crossing Signals On A Single Metal Layer Of An Integrated Circuit                                                 |
| 82095002     | Granted | 7907544       | 3/14/2003   | 3/15/2011  | 10/387456          | US | Overlay Network For Location-independent Communication Between Computer Systems                                                                      |
| 82095059     | Granted | 8799501       | 6/27/2002   | 8/5/2014   | 10/184414          | US | System And Method For Anonymously Sharing And Scoring Information Pointers, Within A System For Harvesting Community Knowledge                       |
| 82095062     | Granted | 6883150       | 3/14/2003   | 4/19/2005  | 10/389136          | US | Automatic Manufacturing Test Case Generation Method And System                                                                                       |
| 82095179     | Granted | 7188174       | 12/30/2002  | 3/6/2007   | 10/330312          | US | Admission Control For Applications In Resource Utility Environments                                                                                  |
| 82095308     | Granted | 8104024       | 10/15/2004  | 1/24/2012  | 10/545524          | US | Voice Mark-up And Interpreter                                                                                                                        |
| 82095548     | Granted | 7356574       | 2/25/2003   | 4/8/2008   | 10/372088          | US | Apparatus And Method For Providing Dynamic And Automated Assignment Of Data Logical Unit Numbers                                                     |

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| 82095557     | Granted | 7039734       | 9/24/2002   | 5/2/2006   | 10/254372          | US | System And Method Of Mastering A Serial Bus                                                               |
| 82095560     | Granted | 6934711       | 10/1/2002   | 8/23/2005  | 10/260412          | US | Method And Arrangement For Communicating With SCSI Devices                                                |
| 82095926     | Granted | 6798663       | 4/21/2003   | 9/28/2004  | 10/419386          | US | Heat Sink Hold-Down With Fan-Module Attach Location                                                       |
| 82095929     | Granted | 7308502       | 12/20/2002  | 12/11/2007 | 10/326774          | US | Method And Architecture To Provide Client Session Failover                                                |
| 82096235     | Granted | 6889167       | 2/27/2003   | 5/3/2005   | 10/376436          | US | Diagnostic Exerciser And Methods Therefor                                                                 |
| 82096481     | Granted | 8597091       | 7/28/2005   | 12/3/2013  | 11/191052          | US | System Fan Management Based On System Loading Optimal For A System Having Replaceable Electronics Modules |
| 82096484     | Granted | 7337018       | 7/31/2003   | 2/26/2008  | 10/632218          | US | Heat Sink Fan Management Based On Performance Requirements                                                |
| 82096490     | Granted | 7054156       | 9/2/2003    | 5/30/2006  | 10/653377          | US | FAN ROTOR SYSTEMS HAVING COLLAPSIBLE FAN BLADES                                                           |
| 82096865     | Granted | 7421433       | 10/31/2002  | 9/2/2008   | 10/284093          | US | Semantic-based system including semantic vectors                                                          |
| 82096874     | Granted | 7433316       | 2/20/2003   | 10/7/2008  | 10/368426          | US | Summarizing Nodes In Route Propagation In Auxiliary Network For P2P Overlay Networks                      |
| 82096877     | Granted | 7379428       | 10/31/2002  | 5/27/2008  | 10/284100          | US | Autonomous System Topology Based Auxiliary Network For Peer-to-Peer Overlay Network                       |
| 82096880     | Granted | 7266125       | 10/31/2002  | 9/4/2007   | 10/284355          | US | Landmark Numbering Based Auxiliary Network For Peer-to-peer Overlay Network                               |
| 82096934     | Granted | 7480143       | 4/21/2003   | 1/20/2009  | 10/419373          | US | Variable-gap Thermal-interface Device                                                                     |
| 82097063     | Granted | 8311194       | 6/13/2005   | 11/13/2012 | 11/629097          | US | Method And System For Establishing Communications                                                         |
| 82097237     | Granted | 7324370       | 8/25/2005   | 1/29/2008  | 11/212936          | US | System And Method For Determining The Value Of A Memory Element                                           |
| 82097240     | Granted | 7493450       | 4/14/2003   | 2/17/2009  | 10/414194          | US | Method Of Triggering Read Cache Pre-fetch To Increase Host Read Throughput                                |
| 82097243     | Granted | 7146467       | 4/14/2003   | 12/5/2006  | 10/414189          | US | Method Of Adaptive Read Cache Pre-fetching To Increase Host Read Throughput                               |
| 82097297     | Granted | 7353539       | 1/16/2003   | 4/1/2008   | 10/345701          | US | SIGNAL LEVEL PROPAGATION MECHANISM FOR DISTRIBUTION OF A PAYLOAD TO VULNERABLE SYSTEMS                    |
| 82097300     | Granted | 6985359       | 4/21/2003   | 1/10/2006  | 10/419406          | US | Variable-Wedge Thermal-interface Device                                                                   |
| 82097309     | Granted | 7364244       | 5/14/2003   | 4/29/2008  | 10/437525          | US | User-controllable Latching Carrier Rail System                                                            |
| 82097483     | Granted | 6823401       | 1/15/2003   | 11/23/2004 | 10/346158          | US | MONITOR FOR OBTAINING DEVICE STATE BY INTELLIGENTS SAMPLING                                               |
| 82097501     | Granted | 6930886       | 4/30/2003   | 8/16/2005  | 10/426582          | US | Electronic Component Securement System                                                                    |
| 82097573     | Granted | 8019989       | 6/6/2003    | 9/13/2011  | 10/455691          | US | Public Key Infrastructure In Network Management                                                           |
| 82097606     | Granted | 8862770       | 11/6/2003   | 10/14/2014 | 10/704041          | US | Processor Architecture Verification                                                                       |
| 82097672     | Granted | 7240039       | 10/29/2003  | 7/3/2007   | 10/695707          | US | System And Method For Combining Valuations Of Multiple Evaluators                                         |

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| 82097675     | Granted | 7634450       | 12/12/2003  | 12/15/2009 | 10/734459          | US | SYSTEM AND METHOD FOR DETERMINING DIFFICULTY MEASURES FOR TRAINING CASES USED IN DEVELOPING SOLUTION TO A PROBLEM          |
| 82097813     | Granted | 6938433       | 12/4/2002   | 9/6/2005   | 10/309196          | US | Cooling System With Evaporators Distributed In Series                                                                      |
| 82097858     | Granted | 7388981       | 2/27/2003   | 6/17/2008  | 10/376435          | US | Telepresence System With Automatic Preservation Of User Head Size                                                          |
| 82097879     | Granted | 7080242       | 12/19/2002  | 7/18/2006  | 10/324345          | US | Instruction Set Reconciliation For Heterogeneous Symmetric multiprocessor Systems                                          |
| 82097885     | Granted | 7228345       | 10/15/2002  | 6/5/2007   | 10/271641          | US | Server With LAN Switch That Connects Ports Based On Best Progress Information                                              |
| 82097987     | Granted | 6803783       | 1/31/2003   | 10/12/2004 | 10/355559          | US | Time Borrowing Using Dynamic Clock Shift For Bus Speed Performance                                                         |
| 82098110     | Granted | 7281076       | 4/30/2003   | 10/9/2007  | 10/427767          | US | Form Factor Converter And Tester In An Open Architecture Modular Computing System                                          |
| 82098251     | Granted | 7424021       | 1/31/2003   | 9/9/2008   | 10/355213          | US | Method And Apparatus For Processing Network Topology Data                                                                  |
| 82098308     | Granted | 7496685       | 3/3/2003    | 2/24/2009  | 10/376252          | US | Method And System For Managing A Device Within A Private Network Using A Management Device External To The Private Network |
| 82098320     | Granted | 7554993       | 3/27/2003   | 6/30/2009  | 10/401237          | US | Method And Apparatus For Performing Connection Management With Multiple Stacks                                             |
| 82098509     | Granted | 7948916       | 1/31/2003   | 5/24/2011  | 10/354960          | US | Method And Apparatus For Discovering Topology Information In A Network                                                     |
| 82098545     | Granted | 6834811       | 4/1/2003    | 12/28/2004 | 10/405307          | US | Market-Based Temperature Control System And Method                                                                         |
| 82098674     | Granted | 7143270       | 1/30/2004   | 11/28/2006 | 10/769203          | US | System And Method For Adding An Instruction To An Instruction Set Architecture                                             |
| 82098806     | Granted | 7924874       | 3/11/2003   | 4/12/2011  | 10/387148          | US | Evaluating And Allocating System Resources To Improve Resource Utilization                                                 |
| 82098821     | Granted | 7730476       | 7/1/2003    | 6/1/2010   | 10/611558          | US | Field-replaceable Unit Revision Compatibility                                                                              |
| 82098941     | Granted | 7089413       | 3/5/2003    | 8/8/2006   | 10/382346          | US | Dynamic Computer System Reset Architecture                                                                                 |
| 82099103     | Granted | 7378165       | 4/29/2003   | 5/27/2008  | 10/425169          | US | System And Method For Providing Electrical Power To An Equipment Rack Using A Fuel Cell                                    |
| 82099109     | Granted | 7873723       | 1/30/2003   | 1/18/2011  | 10/354109          | US | Device Data                                                                                                                |
| 82099112     | Granted | 6796506       | 3/10/2003   | 9/28/2004  | 10/383657          | US | Tracking Electronic Devices                                                                                                |
| 82099115     | Granted | 7350715       | 3/10/2003   | 4/1/2008   | 10/383652          | US | Tracking Electronic Devices                                                                                                |
| 82099118     | Granted | 7272730       | 7/31/2003   | 9/18/2007  | 10/632412          | US | Application-driven Method And Apparatus For Limiting Power Consumption In A Processor-controlled Hardware Platform         |
| 82099124     | Granted | 7373268       | 7/30/2003   | 5/13/2008  | 10/632311          | US | Method And System For Dynamically Controlling Cooling Resources In A Data Center                                           |

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| 82099127     | Granted | 8185348       | 10/31/2003  | 5/22/2012  | 10/698736 US       | US | Techniques For Monitoring A Data Stream                                |
| 82099415     | Granted | 7421689       | 10/28/2003  | 9/2/2008   | 10/695267 US       | US | Processor-architecture For Facilitating A Virtual Machine Monitor      |
| 82099430     | Granted | 7003966       | 12/19/2003  | 2/28/2006  | 10/739037 US       | US | Energy Consumption Reduction In A Multi-Effect Absorption System       |
| 82099439     | Granted | 6920410       | 7/8/2003    | 7/19/2005  | 10/614938 US       | US | Systems And Methods For Testing A Network Service                      |
| 82099442     | Granted | 7496658       | 7/8/2003    | 2/24/2009  | 10/615547 US       | US | Systems And Methods For Testing Network Services                       |
| 82099565     | Granted | D485443       | 11/20/2002  | 1/27/2004  | 29/171299 US       | US | Design For A Bezel Having A Pull Out Label                             |
| 82099667     | Granted | 7003640       | 7/28/2003   | 2/21/2006  | 10/629032 US       | US | Power-Aware Adaptation In An Information Server                        |
| 82099673     | Granted | 7810097       | 7/28/2003   | 10/5/2010  | 10/629033 US       | US | Priority Analysis Of Access Transactions In An Information System      |
| 82099676     | Granted | 7546475       | 5/13/2003   | 6/9/2009   | 10/436849 US       | US | Power-aware Adaptation In A Data Center                                |
| 82099691     | Granted | 7045996       | 1/30/2003   | 5/16/2006  | 10/354112 US       | US | Position Determination Based On Phase Difference                       |
| 82099988     | Granted | 6809925       | 1/31/2003   | 10/26/2004 | 10/356080 US       | US | Dual-Purpose Computer Having Gravity-Actuated Fan Speed Control        |
| 82099991     | Granted | 8291176       | 3/27/2003   | 10/16/2012 | 10/400313 US       | US | Protection Domain Groups                                               |
| 82099994     | Granted | 8296406       | 4/25/2003   | 10/23/2012 | 10/423315 US       | US | Configurable Device Replacement                                        |
| 82100003     | Granted | 7360223       | 9/24/2003   | 4/15/2008  | 10/670482 US       | US | Arrangements And Methods For Invoking An Upcall In A Computer System   |
| 82100006     | Granted | 7081684       | 10/6/2003   | 7/25/2006  | 10/678268 US       | US | Converting Heat Generated By A Component To Electrical Energy          |
| 82100042     | Granted | 7228432       | 9/11/2003   | 6/5/2007   | 10/660335 US       | US | METHOD AND APPARATUS FOR PROVIDING SECURITY FOR A COMPUTER SYSTEM      |
| 82100228     | Granted | 7376949       | 10/1/2003   | 5/20/2008  | 10/676921 US       | US | RESOURCE ALLOCATION AND PROTECTION IN A MULTI-VIRTUAL ENVIRONMENT      |
| 82100231     | Granted | 7451443       | 10/1/2003   | 11/11/2008 | 10/676665 US       | US | Online Computer Maintenance Utilizing A Virtual Machine Monitor        |
| 82100309     | Granted | 7047472       | 10/17/2003  | 5/16/2006  | 10/688520 US       | US | METHOD FOR CORRECTING NOISE ERRORS IN A DIGITAL SIGNAL                 |
| 82100426     | Granted | 7936469       | 12/31/2003  | 5/3/2011   | 10/749525 US       | US | System And Method For Distributed Printer Processing                   |
| 82100429     | Granted | 7039539       | 10/7/2003   | 5/2/2006   | 10/681720 US       | US | Rack Equipment Environmental Condition Adjustment System And Method    |
| 82100444     | Granted | 7424624       | 12/18/2003  | 9/9/2008   | 10/741906 US       | US | Rack Equipment Power Purchase Plan Supervision System And Method       |
| 82100486     | Granted | 6815706       | 12/17/2002  | 11/9/2004  | 10/323139 US       | US | Nano Optical Sensors Via Molecular Self-Assembly                       |
| 82100489     | Granted | 7294526       | 8/12/2004   | 11/13/2007 | 10/917751 US       | US | Nano Optical Sensors Via Molecular Self-assembly                       |
| 82100501     | Granted | D546827       | 5/21/2003   | 7/17/2007  | 29/182196 US       | US | Bezel For Rack-mounted Device                                          |
| 82100504     | Granted | 7068498       | 5/20/2003   | 6/27/2006  | 10/442036 US       | US | Computer System With Slidable Motherboard                              |
| 82100561     | Granted | 8006115       | 10/6/2003   | 8/23/2011  | 10/679725 US       | US | Central Processing Unit With Multiple Clock Zones And Operating Method |

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| 82100615     | Granted | 7321561       | 6/27/2003   | 1/22/2008  | 10/607731          | US | Verification Of Connections Between Devices In A Network                                                                                |
| 82100675     | Granted | 7533285       | 4/22/2004   | 5/12/2009  | 10/830375          | US | Synchronizing Link Delay Measurement Over Serial Links                                                                                  |
| 82100678     | Granted | 7289587       | 4/22/2004   | 10/30/2007 | 10/830367          | US | Repeatability Over Communication Links                                                                                                  |
| 82100681     | Granted | 6832168       | 4/4/2003    | 12/14/2004 | 10/407757          | US | METHOD AND SYSTEM FOR VERIFYING NETWORK DEVICE POWER CABLING CONFIGURATION                                                              |
| 82100690     | Granted | 7478229       | 3/11/2003   | 1/13/2009  | 10/386189          | US | Apparatus And Methods For Device Configuration And Management                                                                           |
| 82100693     | Granted | D492315       | 11/18/2002  | 6/29/2004  | 29/171168          | US | Storage Rack Door                                                                                                                       |
| 82100855     | Granted | 7092252       | 4/17/2003   | 8/15/2006  | 10/419032          | US | Air-directing Unit                                                                                                                      |
| 82101107     | Granted | 7057506       | 1/16/2004   | 6/6/2006   | 10/758229          | US | Cooling Fluid Provisioning With Location Aware Sensors                                                                                  |
| 82101185     | Granted | 6791843       | 6/11/2003   | 9/14/2004  | 10/459231          | US | Parallel Board Connection System And Method                                                                                             |
| 82101191     | Granted | 7236358       | 6/11/2003   | 6/26/2007  | 10/459075          | US | Computer System                                                                                                                         |
| 82101293     | Granted | 7313238       | 1/31/2003   | 12/25/2007 | 10/355470          | US | Method And System For Relating Cryptographic Keys                                                                                       |
| 82101308     | Granted | 7140801       | 8/22/2003   | 11/28/2006 | 10/646005          | US | Pre-loading Latch                                                                                                                       |
| 82101542     | Granted | 7916854       | 4/2/2004    | 3/29/2011  | 10/817575          | US | Methods And Apparatus For Controlling Processing Entities, Such As Distributed Signalling Gateways                                      |
| 82101554     | Granted | 7415643       | 8/6/2003    | 8/19/2008  | 10/635371          | US | Coverage Circuit For Performance Counter                                                                                                |
| 82101560     | Granted | 7275191       | 8/6/2003    | 9/25/2007  | 10/635372          | US | Coverage Decoder Circuit For Performance Counter                                                                                        |
| 82101602     | Granted | 7188277       | 3/28/2003   | 3/6/2007   | 10/402034          | US | INTEGRATED CIRCUIT                                                                                                                      |
| 82101611     | Granted | 7483385       | 3/26/2004   | 1/27/2009  | 10/811215          | US | Process For Monitoring The Quality Of Service In A Telecommunication Network And Apparatus For The Same                                 |
| 82101614     | Granted | 8352588       | 7/9/2003    | 1/8/2013   | 10/617002          | US | Systems And Methods For Collecting Data Regarding Network Service Operation                                                             |
| 82101617     | Granted | 6876207       | 8/1/2003    | 4/5/2005   | 10/632270          | US | System And Method For Testing Devices                                                                                                   |
| 82101731     | Granted | 7991930       | 2/23/2004   | 8/2/2011   | 10/783031          | US | DATA STORAGE DRIVE AND METHOD EMPLOYING DATA COMPRESSION                                                                                |
| 82101809     | Granted | 7075788       | 6/11/2003   | 7/11/2006  | 10/459301          | US | Computer Cooling System And Method                                                                                                      |
| 82101920     | Granted | 7057415       | 12/10/2003  | 6/6/2006   | 10/732695          | US | Output Buffer Compensation Control                                                                                                      |
| 82101980     | Granted | 7558216       | 2/1/2005    | 7/7/2009   | 11/048126          | US | Network Connection Control                                                                                                              |
| 82101992     | Granted | 6693798       | 5/9/2003    | 2/17/2004  | 10/434619          | US | Electronic Unit Enclosure And Method                                                                                                    |
| 82101995     | Granted | 6882540       | 11/3/2003   | 4/19/2005  | 10/701281          | US | Electronic Unit Enclosure And Method                                                                                                    |
| 82102115     | Granted | 7426570       | 7/25/2003   | 9/16/2008  | 10/627324          | US | DETERMINING PLACEMENT OF DISTRIBUTED APPLICATION ONTO DISTRIBUTED RESOURCE INFRASTRUCTURE                                               |
| 82102118     | Granted | 7277960       | 7/25/2003   | 10/2/2007  | 10/627883          | US | INCORPORATING CONSTRAINTS AND PREFERENCES FOR DETERMINING PLACEMENT OF DISTRIBUTED APPLICATION ONTO DISTRIBUTED RESOURCE INFRASTRUCTURE |
| 82102124     | Granted | 7340630       | 8/8/2003    | 3/4/2008   | 10/638696          | US | Multiprocessor System With Interactive Synchronization Of Local Clocks                                                                  |
| 82102130     | Granted | 7018215       | 12/19/2003  | 3/28/2006  | 10/741577          | US | Routing System                                                                                                                          |
| 82102184     | Granted | 7543291       | 8/1/2003    | 6/2/2009   | 10/632772          | US | Processor Purging System And Method                                                                                                     |

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| 82102187     | Granted | 7466699       | 4/30/2004   | 12/16/2008 | 10/835821          | US | SYSTEM FOR COMMUNICATING BETWEEN NETWORK ENDS POINTS USING A PAYLOAD OFFSET AND BUFFER POOL HANDLE   |
| 82102190     | Granted | 7440458       | 4/30/2004   | 10/21/2008 | 10/835940          | US | System For Determining Network Route Quality Using Sequence Numbers                                  |
| 82102298     | Granted | 6768952       | 10/21/2002  | 7/27/2004  | 10/274787          | US | System And Method Of Measuring Low Impedances                                                        |
| 82102430     | Granted | 7483391       | 9/19/2003   | 1/27/2009  | 10/666620          | US | Providing A Notification Including Location Information For Nodes In An Overlay Network              |
| 82102433     | Granted | 7788400       | 9/19/2003   | 8/31/2010  | 10/666621          | US | Utilizing Proximity Information In An Overlay Network                                                |
| 82102733     | Granted | 7567250       | 10/27/2003  | 7/28/2009  | 10/694076          | US | Visual Boundaries For Aggregate Information In Pixel-oriented Graphs                                 |
| 82103249     | Granted | 7966389       | 4/22/2003   | 6/21/2011  | 10/420584          | US | System And Method For Application Programming Interface For Extended Intelligent Platform Management |
| 82103300     | Granted | 7064956       | 12/1/2003   | 6/20/2006  | 10/724077          | US | Cooling System For A Display Projector                                                               |
| 82103360     | Granted | 8086884       | 12/16/2002  | 12/27/2011 | 10/320586          | US | System And Method For Implementing An Integrated Circuit Having A Dynamically Variable Power Limit   |
| 82103474     | Granted | 8296847       | 7/25/2003   | 10/23/2012 | 10/627017          | US | Method Of Managing Utilization Of Network Intrusion Detection Systems In A Dynamic Data Center       |
| 82103480     | Granted | 8326925       | 1/31/2005   | 12/4/2012  | 11/047254          | US | Connecting To Experts In A Discussion Board                                                          |
| 82103483     | Granted | 8327202       | 7/13/2005   | 12/4/2012  | 11/180429          | US | System And Method For Scan Testing                                                                   |
| 82103495     | Granted | 7082032       | 8/25/2003   | 7/25/2006  | 10/648532          | US | HEAT DISSIPATION DEVICE WITH TILTED FINS                                                             |
| 82103498     | Granted | 6995973       | 7/15/2003   | 2/7/2006   | 10/620640          | US | Preventing A Plurality Of Electronic Devices From Being Pulled Out Of A Rack Simultaneously          |
| 82103501     | Granted | 7590909       | 8/24/2005   | 9/15/2009  | 11/210415          | US | In-circuit Testing System And Method                                                                 |
| 82103543     | Granted | 7630304       | 6/12/2003   | 12/8/2009  | 10/461080          | US | METHOD OF OVERFLOW RECOVERY OF I2C PACKETS ON AN I2C ROUTER                                          |
| 82103561     | Granted | 7276813       | 2/5/2004    | 10/2/2007  | 10/773008          | US | Redundant Input Power System                                                                         |
| 82103624     | Granted | 7570508       | 12/22/2003  | 8/4/2009   | 10/743165          | US | Method And Apparatus For Reducing Soft Errors                                                        |
| 82103663     | Granted | 6798661       | 5/8/2003    | 9/28/2004  | 10/434762          | US | CHASSIS CONDUCTED COOLING THERMAL DISSIPATION APPARATUS FOR SERVERS                                  |
| 82103666     | Granted | 7145775       | 7/30/2004   | 12/5/2006  | 10/903000          | US | Chassis Conducted Cooling Thermal Dissipation Apparatus For Servers                                  |
| 82103681     | Granted | 8621304       | 10/7/2004   | 12/31/2013 | 10/960590          | US | Built-in- Self-test System And Method For An Integrated Circuit                                      |
| 82103690     | Granted | 7821792       | 10/31/2007  | 10/26/2010 | 11/932153          | US | Cell Board Interconnection Architecture                                                              |
| 82103864     | Granted | 7487399       | 11/7/2003   | 2/3/2009   | 10/703306          | US | SYSTEM AND METHOD FOR TESTING A COMPONENT IN A COMPUTER SYSTEM USING FREQUENCY MARGINING             |
| 82103873     | Granted | 7418367       | 10/31/2003  | 8/26/2008  | 10/699423          | US | System And Method For Testing A Cell                                                                 |
| 82104731     | Granted | 7103785       | 5/30/2003   | 9/5/2006   | 10/448708          | US | METHOD AND APPARATUS FOR POWER MANAGEMENT EVENT WAKE UP                                              |

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| 82104851     | Granted   | 7480797       | 7/31/2004   | 1/20/2009  | 10/909793          | US | Method And System For Preventing Current-privilege-leak information Leaks To Non-privileged Code                              |
| 82104917     | Granted   | 7917903       | 3/27/2003   | 3/29/2011  | 10/400556          | US | Quality Of Service Controller And Method For A Data Storage System                                                            |
| 82104926     | Granted   | 7643983       | 3/27/2003   | 1/5/2010   | 10/400232          | US | Data Storage System Emulation                                                                                                 |
| 82104986     | Granted   | 7379031       | 11/18/2003  | 5/27/2008  | 10/715960          | US | Generating Pointer Position Data From Position Data Of Pointing Device Of A Remote Console                                    |
| 82104998     | Granted   | 7671283       | 1/20/2005   | 3/2/2010   | 11/038964          | US | Apparatus For Shielding Electromagnetic Radiation                                                                             |
| 82105043     | Granted   | 8566446       | 1/28/2004   | 10/22/2013 | 10/767130          | US | Write Operation Control In Storage Networks                                                                                   |
| 82105160     | Granted   | 7107600       | 3/17/2003   | 9/12/2006  | 10/389573          | US | System And Method For Cleaning Electrical Delivery Systems                                                                    |
| 82105175     | Granted   | 7149945       | 5/9/2003    | 12/12/2006 | 10/435149          | US | Systems And Methods For Providing Error Correction Code Testing Functionality                                                 |
| 82105187     | Granted   | 7366854       | 5/8/2003    | 4/29/2008  | 10/434044          | US | Systems And Methods For Scheduling Memory Requests Utilizing Multi-level Arbitration                                          |
| 82105226     | Granted   | 7447205       | 5/9/2003    | 11/4/2008  | 10/435639          | US | Systems And Methods To Insert Broadcast Transactions Into A Fast Data Stream Of Transactions                                  |
| 82105289     | Granted   | 7120023       | 8/25/2003   | 10/10/2006 | 10/649518          | US | Method Of Assembly Of A Wedge Thermal Interface To Allow Expansion After Assembly                                             |
| 82105313     | Granted   | 6788135       | 7/8/2003    | 9/7/2004   | 10/615549          | US | Terminating Pathway For A Clock Signal                                                                                        |
| 82105472     | Granted   | 7410904       | 4/24/2003   | 8/12/2008  | 10/423063          | US | Sensor Produced Using Imprint Lithography                                                                                     |
| 82105538     | Granted   | 8065306       | 5/26/2009   | 11/22/2011 | 12/472203          | US | Method And System For Lexical Mapping Between Document Sets Having A Common Topic                                             |
| 82105547     | Granted   | 7600261       | 3/26/2004   | 10/6/2009  | 10/810308          | US | Security Attributes In Trusted Computing Systems                                                                              |
| 82105556     | Granted   | 7552328       | 3/26/2004   | 6/23/2009  | 10/810348          | US | SECURITY ATTRIBUTES OF NODES IN TRUSTED COMPUTING SYSTEMS                                                                     |
| 82105742     | Granted   | 7454424       | 1/16/2003   | 11/18/2008 | 10/345719          | US | SYSTEM AND METHOD FOR EFFICIENTLY REPLICATING A FILE                                                                          |
| 82105748     | Granted   | 7281063       | 7/22/2003   | 10/9/2007  | 10/624625          | US | SIGNAL ROUTING CIRCUIT BOARD COUPLING CONTROLLER AND STORAGE ARRAY CIRCUIT BOARD FOR STORAGE SYSTEM                           |
| 82105793     | Granted   | 7392329       | 3/28/2003   | 6/24/2008  | 10/401820          | US | System And Method For Applying An Action Initiated For A Portion Of A Plurality Of Devices To All Of The Plurality Of Devices |
| 82105796     | Granted   | 7840072       | 3/13/2003   | 11/23/2010 | 10/386462          | US | Method And System For Pattern Matching                                                                                        |
| 82105853     | Granted   | 8670959       | 7/26/2006   | 3/11/2014  | 11/494292          | US | PROCESSING AND DISPLAY OF A REAL WORLD MODEL                                                                                  |
| 82105865     | Published |               | 7/8/2005    |            | 11/178110          | US | Analysing A Multi Stage Process                                                                                               |
| 82105868     | Granted   | 6776578       | 11/26/2002  | 8/17/2004  | 10/304923          | US | Winglet-Enhanced Fan                                                                                                          |

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| 82105928     | Granted | 7506085       | 10/20/2006  | 3/17/2009  | 11/551438          | US | SYSTEM AND METHOD FOR SENDING DATA ACROSS A BANDWIDTH LIMITED CHANNEL                                             |
|              |         |               |             |            |                    |    | CABLE HAVING IN-BAND AND SIDE-BAND SIGNAL CONDUCTORS                                                              |
| 82106045     | Granted | 8078670       | 5/24/2004   | 12/13/2011 | 10/852850          | US | Method And Apparatus For Providing Support For An Electronic Device                                               |
| 82106048     | Granted | 7146496       | 1/23/2003   | 12/5/2006  | 10/350660          | US | Methods And Apparatus For Managing Temporary Capacity In A Computer System                                        |
| 82106108     | Granted | 7890999       | 8/7/2003    | 2/15/2011  | 10/637172          | US | RPC Port Mapper Integrity Checker To Improve Security Of A Provisionable Network                                  |
| 82106180     | Granted | 7096310       | 3/16/2004   | 8/22/2006  | 10/801617          | US | Switch Configurable For A Plurality Of Communication Protocols                                                    |
| 82106237     | Granted | 7521264       | 1/5/2007    | 4/21/2009  | 11/649931          | US | SPIN INJECTION CONTROL USING ELECTRIC CURRENT                                                                     |
| 82106249     | Granted | 7324685       | 10/20/2003  | 1/29/2008  | 10/689410          | US | Inspection Systems And Methods                                                                                    |
| 82106285     | Granted | 7313585       | 8/30/2003   | 12/25/2007 | 10/652899          | US | Multiplier Circuit                                                                                                |
| 82106294     | Granted | 7577670       | 3/8/2004    | 8/18/2009  | 10/794063          | US | Method And Apparatus For Inferring Address And Subnet Relationships                                               |
| 82106300     | Granted | 6837626       | 11/12/2003  | 1/4/2005   | 10/712877          | US | Electro-Optical Connector                                                                                         |
| 82106408     | Granted | 7603582       | 2/17/2006   | 10/13/2009 | 11/356576          | US | Systems And Methods For CPU Repair                                                                                |
| 82106414     | Granted | 8667324       | 2/17/2006   | 3/4/2014   | 11/356521          | US | Systems And Methods For CPU Repair                                                                                |
| 82106423     | Granted | 7805723       | 10/1/2003   | 9/28/2010  | 10/677159          | US | Runtime Virtualization And Devirtualization Of Memory By A Virtual Machine Monitor                                |
| 82106534     | Granted | 8214786       | 9/8/2004    | 7/3/2012   | 10/935845          | US | Scalable, Component-accessible, And Highly Interconnected Three-dimensional Component Arrangement Within A System |
| 82106600     | Granted | 7640551       | 6/9/2003    | 12/29/2009 | 10/458449          | US | System And Method For Asynchronous Reporting Of Printer Maintenance Data For A Printer                            |
| 82106732     | Granted | 6879013       | 7/30/2003   | 38454      | 10/632038          | US | Amplifiers Using Spin Injection And Magnetic Control Of Electron Spins                                            |
| 82106738     | Granted | 7739240       | 12/9/2002   | 6/15/2010  | 10/315582          | US | Replication And Replica Management In A Wide Area File System                                                     |
| 82107104     | Granted | 7584405       | 12/3/2003   | 9/1/2009   | 10/726976          | US | Fault-detecting Computer System                                                                                   |
| 82107122     | Granted | 7606892       | 4/22/2003   | 10/20/2009 | 10/421249          | US | Method And System Of Supporting A Computer Network Resource Pool                                                  |
| 82107167     | Granted | 7518884       | 7/5/2007    | 4/14/2009  | 11/825153          | US | Tailoring Impedances Of Conductive Traces In A Circuit Board                                                      |
| 82107296     | Granted | D454881       | 12/22/2000  | 3/26/2002  | 29/134609          | US | SERVER CABINET                                                                                                    |
| 82107299     | Granted | D455154       | 12/22/2000  | 4/2/2002   | 29/134489          | US | DOUBLE SERVER BEZEL                                                                                               |
| 82109603     | Granted | D461807       | 1/7/2000    | 8/20/2002  | 29/116633          | US | SINGLE CONNECTOR ATTACHMENT DRIVE TRAY                                                                            |
| 82110281     | Granted | 7936763       | 5/18/2004   | 5/3/2011   | 10/557405          | US | Method And Apparatus For Load-balancing In A Distributed Processing System                                        |

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| 82110308     | Granted | 6189111       | 3/26/1998   | 2/13/2001  | 09/048937          | US | RESOURCE HARVESTING IN SCALABLE, FAULT-TOLERANT SINGLE SYSTEM IMAGE CLUSTERS                                                                   |
| 82110362     | Granted | 6279094       | 8/20/1998   | 8/21/2001  | 09/137763          | US | METHOD AND APPARATUS FOR MANAGING INVALIDATION OF VIRTUAL MEMORY MAPPING TABLE ENTRIES                                                         |
| 82110365     | Granted | 6279095       | 11/9/1998   | 8/21/2001  | 09/189601          | US | METHOD AND APPARATUS FOR OMNIBUS WIRING OF VIRTUAL MAPPING TABLE ENTRIES                                                                       |
| 82110368     | Granted | 6219770       | 3/23/1998   | 4/17/2001  | 09/046943          | US | METHOD AND APPARATUS FOR MANAGING COPY ON WRITE OPERATIONS IN A VIRTUAL MEMORY                                                                 |
| 82110416     | Granted | 6393582       | 12/10/1998  | 5/21/2002  | 09/209635          | US | ERROR SELF-CHECKING AND RECOVERY USING LOCK-STEPPED PROCESSOR PAIR ARCHITECTURE                                                                |
| 82110476     | Granted | 6457125       | 12/14/1998  | 9/24/2002  | 09/212003          | US | ENCRYPTED DOWNLOAD OF SRAM-BASED FPGAS                                                                                                         |
| 82110485     | Granted | 6249879       | 4/30/1998   | 6/19/2001  | 09/071048          | US | ROOT FILESYSTEM FAILOVER IN A SINGLE SYSTEM IMAGE ENVIRONMENT                                                                                  |
| 82110491     | Granted | 6122629       | 4/30/1998   | 9/19/2000  | 09/070897          | US | METHOD FOR MULTILEVEL DATA INTEGRITY IN A COMPUTER NODE CLUSTER ENVIRONMENT                                                                    |
| 82110494     | Granted | 6247139       | 4/30/1998   | 6/12/2001  | 09/071145          | US | FILESYSTEM FAILOVER IN A SINGLE SYSTEM IMAGE ENVIRONMENT                                                                                       |
| 82110665     | Granted | 6173249       | 7/24/1998   | 1/9/2001   | 09/122689          | US | METHOD OF DETERMINING OF A PROCESS UNDER A SIMULATED OPERATING SYSTEM                                                                          |
| 82110674     | Granted | 6378072       | 2/3/1998    | 4/23/2002  | 09/017759          | US | CRYPTOGRAPHIC SYSTEM                                                                                                                           |
| 82110677     | Granted | 7055029       | 9/7/2001    | 5/30/2006  | 09/949323          | US | CRYPTOGRAPHIC SYSTEM ENABLING OWNERSHIP OF A SECURE PROCESS                                                                                    |
| 82110683     | Granted | 6625601       | 1/7/1999    | 9/23/2003  | 09/226998          | US | ESCROW-LOCKING MULTITHREADED PROCESS-PAIR RESOURCE MANAGER DICTIONARY                                                                          |
| 82110737     | Granted | 6339772       | 7/6/1999    | 1/15/2002  | 09/347997          | US | SYSTEM AND METHOD FOR PERFORMING DATABASE OPERATIONS ON A CONTINUOUS STREAM OF TUPLES                                                          |
| 82110740     | Granted | 6604102       | 11/29/2001  | 8/5/2003   | 09/997823          | US | SYSTEM AND METHOD FOR PERFORMING DATABASE OPERATIONS ON A CONTINUOUS STREAM OF TUPLES                                                          |
| 82110746     | Granted | 6304873       | 7/6/1999    | 10/16/2001 | 09/347995          | US | SYSTEM AND METHOD FOR PERFORMING DATABASE OPERATIONS AND FOR SKIPPING OVER TUPLES LOCKED IN AN INCOMPATIBLE MODE                               |
| 82110797     | Granted | 6205441       | 3/31/1999   | 3/20/2001  | 09/283384          | US | SYSTEM AND METHOD FOR REDUCING COMPILE TIME IN A TOP DOWN RULE BASED SYSTEM USING RULE HEURISTICS BASED UPON THE PREDICTED RESULTING DATA FLOW |
| 82110800     | Granted | 6870814       | 10/12/1999  | 3/22/2005  | 09/415731          | US | LINK EXTENDERS WITH ERROR PROPAGATION AND REPORTING                                                                                            |
| 82110806     | Granted | 6738344       | 9/27/2000   | 5/18/2004  | 09/671940          | US | LINK EXTENDERS WITH LINK ALIVE PROPAGATION                                                                                                     |
| 82110842     | Granted | 6765922       | 9/27/2000   | 7/20/2004  | 09/671938          | US | Speculative Transmit For System Area Network Latency Reduction                                                                                 |

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| 82110845     | Granted | 6882656       | 4/13/2004   | 4/19/2005  | 10/823182          | US | Speculative Transmit For System Area Network Latency Reduction                                                      |
| 82111547     | Granted | 5757918       | 9/30/1996   | 5/26/1998  | 08/727174          | US | METHOD AND APPARATUS FOR USER AND SECURITY DEPENDENT AUTHENTICATION                                                 |
| 82111664     | Granted | 5890003       | 9/7/1993    | 3/30/1999  | 08/116950          | US | SYNCHRONIZATION OF INTERRUPTS BETWEEN ASYNCHRONOUSLY OPERATING CPUS IN FAULT TOLERANT COMPUTER SYSTEM               |
| 82114988     | Granted | 6233702       | 6/7/1995    | 5/15/2001  | 08/485055          | US | SELF-CHECKED, LOCK-STEP PROCESSOR PAIRS                                                                             |
| 82115042     | Granted | 5914953       | 6/7/1995    | 6/22/1999  | 08/474772          | US | NETWORK MESSAGE ROUTING USING ROUTING TABLE INFORMATION AND SUPPLEMENTAL ENABLE INFORMATION FOR DEADLOCK PREVENTION |
| 82115852     | Granted | 5842204       | 11/1/1994   | 11/24/1998 | 08/332966          | US | METHOD AND APPARATUS FOR TRANSLATING SOURCE CODE FROM ONE HIGH-LEVEL COMPUTER LANGUAGE TO ANOTHER                   |
| 82115984     | Granted | 5832203       | 1/23/1995   | 11/3/1998  | 08/377381          | US | A METHOD FOR PROVIDING RECOVERY FROM A FAILURE IN A SYSTEM UTILIZING DISTRIBUTED AUDIT                              |
| 82116542     | Granted | 5872701       | 2/27/1997   | 2/16/1999  | 08/807608          | US | BLIND ALIGNMENT METHOD AND APPARATUS FOR CIRCUIT BOARDS                                                             |
| 82116551     | Granted | 6035301       | 12/18/1997  | 3/7/2000   | 08/993216          | US | METHOD AND APPARATUS FOR ACCESSING TRANSACTION SERVICES USING OBJECT LINKING AND EMBEDDING                          |
| 82116599     | Granted | 5954794       | 12/20/1995  | 9/21/1999  | 08/578366          | US | COMPUTER SYSTEM DATA I/O BY REFERENCE AMONG I/O DEVICES AND MULTIPLE MEMORY UNITS                                   |
| 82116662     | Granted | 5785397       | 12/21/1995  | 7/28/1998  | 08/576750          | US | MODULE CONNECTION MECHANISM                                                                                         |
| 82116665     | Granted | 5725324       | 12/21/1995  | 3/10/1998  | 08/576747          | US | MODULE LATCH ASSEMBLY                                                                                               |
| 82116668     | Granted | 5861684       | 12/27/1995  | 1/19/1999  | 08/579376          | US | FLEXIBLE IMPLEMENTATION OF DISTRIBUTED DC POWER                                                                     |
| 82116671     | Granted | 5602721       | 12/22/1995  | 2/11/1997  | 08/572903          | US | EXPANDABLE MODULAR COMPUTER SYSTEM                                                                                  |
| 82116677     | Granted | 5826066       | 8/8/1996    | 10/20/1998 | 08/694073          | US | METHOD FOR KEEPING ACCURATE TIME IN A COMPUTER SYSTEM                                                               |
| 82116773     | Granted | 5819255       | 12/27/1996  | 10/6/1998  | 08/773695          | US | SYSTEM AND METHOD FOR DATABASE QUERY OPTIMIZATION                                                                   |
| 82116839     | Granted | 5822747       | 8/23/1996   | 10/13/1998 | 08/702106          | US | AN IMPROVED SYSTEM AND METHOD FOR OPTIMIZING DATABASE QUERIES                                                       |
| 82116851     | Granted | 5999936       | 6/2/1997    | 12/7/1999  | 08/865405          | US | METHOD AND APPARATUS FOR COMPRESSING AND DECOMPRESSING SEQUENTIAL RECORDS IN A COMPUTER SYSTEM                      |
| 82116905     | Granted | 6199169       | 12/15/1998  | 3/6/2001   | 09/212021          | US | SYSTEM AND METHOD FOR SYNCHRONIZING TIME ACROSS A COMPUTER CLUSTER                                                  |
| 82116908     | Granted | 6351821       | 1/22/2001   | 2/26/2002  | 09/767586          | US | SYSTEM AND METHOD FOR SYNCHRONIZING TIME ACROSS A COMPUTER CLUSTER                                                  |

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| 82116911     | Granted | 6058388       | 6/16/1997   | 5/2/2000   | 08/876850          | US | IMPLEMENTATION OF ESCROW-LOCKING SCALAR QUANTITIES VIA PROCESS-PAIR RESOURCE MANAGERS                                                    |
| 82116914     | Granted | 6128615       | 6/17/1997   | 10/3/2000  | 08/877529          | US | PROCESS-PAIR RESOURCE MANAGER IMPLEMENTATION OF OBJECT BAGS                                                                              |
| 82116917     | Granted | 6105147       | 4/16/1997   | 8/15/2000  | 08/840749          | US | USING PROCESS PAIRS AS TRANSACTION-COORDINATED RESOURCE MANAGERS                                                                         |
| 82116959     | Granted | 6085083       | 1/11/1997   | 7/4/2000   | 08/781264          | US | METHOD AND APPARATUS FOR PROVIDING FRAUD PROTECTION MEDIATION IN A MOBILE TELEPHONE SYSTEM                                               |
| 82116962     | Granted | 6112079       | 1/4/1999    | 8/29/2000  | 09/225176          | US | METHOD AND APPARATUS FOR PROVIDING FRAUD PROTECTION MEDIATION IN A MOBILE TELEPHONE SYSTEM                                               |
| 82116968     | Granted | 6026298       | 1/11/1997   | 2/15/2000  | 08/781262          | US | METHOD AND APPARATUS FOR PROVIDING SWITCH CAPABILITY MEDIATION IN A MOBILE TELEPHONE SYSTEM                                              |
| 82116971     | Granted | 6421537       | 8/31/1999   | 7/16/2002  | 09/387168          | US | METHOD AND APPARATUS FOR PROVIDING SWITCH CAPABILITY MEDIATION IN A MOBILE TELEPHONE SYSTEM                                              |
| 82116977     | Granted | 6633935       | 9/27/2000   | 10/14/2003 | 09/671939          | US | AUTOMATIC BUS TERMINATION READJUSTMENT                                                                                                   |
| 82117025     | Granted | 6148308       | 4/30/1993   | 11/14/2000 | 08/055802          | US | METHOD OF SELECTING AND REPRESENTING TIME-VARYING DATA                                                                                   |
| 82117208     | Granted | 6791429       | 10/30/2003  | 9/14/2004  | 10/697130          | US | TRANSMISSION LINE PARASITIC ELEMENT DISCONTINUITY CANCELLATION                                                                           |
| 82117211     | Granted | 6980063       | 8/3/2004    | 12/27/2005 | 10/910028          | US | Transmission Line Parasitic Element Discontinuity Cancellation                                                                           |
| 82117226     | Granted | 6601187       | 3/31/2000   | 7/29/2003  | 09/539745          | US | SYSTEM FOR DATA REPLICATION USING REDUNDANT PAIRS OF STORAGE CONTROLLERS, FIBRE CHANNEL FABRICS AND LINKS THEREBETWEEN                   |
| 82117229     | Granted | 6658590       | 3/30/2000   | 12/2/2003  | 09/539011          | US | CONTROLLER-BASED TRANSACTION LOGGING SYSTEM FOR DATA RECOVERY IN A STORAGE AREA NETWORK                                                  |
| 82117232     | Granted | 7111189       | 3/30/2000   | 9/19/2006  | 09/538700          | US | METHOD FOR TRANSACTION LOG FAILOVER MERGING DURING ASYNCHRONOUS OPERATIONS IN A DATA STORAGE NETWORK                                     |
| 82117235     | Granted | 6629264       | 3/30/2000   | 9/30/2003  | 09/538908          | US | CONTROLLER-BASED REMOTE COPY SYSTEM WITH LOGICAL UNIT GROUPING                                                                           |
| 82117238     | Granted | 7058848       | 9/15/2003   | 6/6/2006   | 10/662668          | US | Controller-based Remote Copy System With Logical Unit Grouping                                                                           |
| 82117271     | Granted | 6754737       | 12/24/2001  | 6/22/2004  | 10/035983          | US | METHOD AND APPARATUS TO ALLOW DYNAMIC VARIATION OF ORDERING ENFORCEMENT BETWEEN TRANSACTIONS IN A STRONGLY ORDERED COMPUTER INTERCONNECT |

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| 82117274     | Granted | 7308522       | 6/9/2004    | 12/11/2007 | 10/864617          | US | Method And Apparatus To Allow Dynamic Variation Of Ordering Enforcement Between Transactions In A Strongly Ordered Computer Interconnect |
| 82117286     | Granted | 6745174       | 3/29/2001   | 6/1/2004   | 09/822996          | US | METHOD OF EXECUTING BEFORE-TRIGGERS IN AN ACTIVE DATABASE                                                                                |
| 82117298     | Granted | 6961930       | 3/31/2000   | 11/1/2005  | 09/540952          | US | Efficient, Transparent And Flexible Latency Sampling                                                                                     |
| 82117301     | Granted | 6817009       | 11/30/2000  | 11/9/2004  | 09/728629          | US | METHOD AND APPARATUS FOR VERIFYING DATA LOCALITY OF A SINGLE THREAD                                                                      |
| 82117337     | Granted | 6442067       | 5/23/2000   | 8/27/2002  | 09/576849          | US | RECOVERY ROM FOR ARRAY CONTROLLERS                                                                                                       |
| 82117340     | Granted | 6807649       | 5/23/2000   | 10/19/2004 | 09/576749          | US | ENCRYPTION KEYS FOR MULTIPLE DRIVE FAULT TOLERANCE                                                                                       |
| 82117343     | Granted | 8015260       | 8/26/2004   | 9/6/2011   | 10/926497          | US | ENCRYPTION KEYS FOR MULTIPLE DRIVE FAULT TOLERANCE                                                                                       |
| 82117346     | Granted | 6643822       | 5/23/2000   | 11/4/2003  | 09/576666          | US | COMPUTER SYSTEM WITH GREATER THAN FIFTEEN DRIVE FAULT TOLERANCE                                                                          |
| 82117349     | Granted | 6694479       | 5/23/2000   | 2/17/2004  | 09/576665          | US | MULTIPLE DRIVE FAILURE RECOVERY FOR A COMPUTER SYSTEM HAVING AN ARRAY OF STORAGE DRIVES                                                  |
| 82117352     | Granted | 6732298       | 7/31/2000   | 5/4/2004   | 09/628747          | US | NONMASKABLE INTERRUPT WORKAROUND FOR A SINGLE EXCEPTION INTERRUPT HANDLER PROCESSOR                                                      |
| 82117403     | Granted | 6692293       | 11/13/2002  | 2/17/2004  | 10/293517          | US | TECHNIQUE FOR IDENTIFYING MULTIPLE CIRCUIT COMPONENTS                                                                                    |
| 82117412     | Granted | 6785835       | 1/25/2001   | 8/31/2004  | 09/769957          | US | RAID MEMORY                                                                                                                              |
| 82117418     | Granted | 6690757       | 6/20/2000   | 2/10/2004  | 09/596980          | US | HIGH-SPEED INTERCONNECTION ADAPTER HAVING AUTOMATED LANE DE-SKEW                                                                         |
| 82117421     | Granted | 7197100       | 10/8/2003   | 3/27/2007  | 10/680913          | US | HIGH-SPEED INTERCONNECTION ADAPTER HAVING AUTOMATED LANE DE-SKEW                                                                         |
| 82117466     | Granted | 6608564       | 1/25/2001   | 8/19/2003  | 09/770100          | US | REMOVABLE MEMORY CARTRIDGE SYSTEM FOR USE WITH A SERVER OR OTHER PROCESSOR-BASED DEVICE                                                  |
| 82117469     | Granted | 7116241       | 5/14/2003   | 10/3/2006  | 10/437571          | US | Removable Memory Cartridge System For Use With A Server Or Other Processor-based Device                                                  |
| 82117472     | Granted | 6975241       | 5/14/2003   | 12/13/2005 | 10/438150          | US | Removable Memory Cartridge System For Use With A Server Or Other Processor-Based Device                                                  |
| 82117475     | Granted | 6747563       | 5/14/2003   | 6/8/2004   | 10/437567          | US | REMOVABLE MEMORY CARTRIDGE SYSTEM FOR USE WITH A SERVER OR OTHER PROCESSOR-BASED DEVICE                                                  |
| 82117523     | Granted | 6760229       | 9/9/2002    | 7/6/2004   | 10/237420          | US | System For Protecting Electronic Components                                                                                              |
| 82117535     | Granted | 6381149       | 6/9/2000    | 4/30/2002  | 09/591524          | US | CARDGUIDE RETAINER                                                                                                                       |
| 82117538     | Granted | 6735091       | 4/23/2002   | 5/11/2004  | 10/128104          | US | CARDGUIDE RETAINER                                                                                                                       |
| 82117541     | Granted | 6901467       | 2/23/2001   | 5/31/2005  | 09/792867          | US | ENHANCING A PCI-X SPLIT COMPLETION TRANSACTION BY ALIGNING CACHELINES WITH AN ALLOWABLE DISCONNECT BOUNDARY'S ENDING ADDRESS             |

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| 82117550     | Granted | 6754838       | 1/26/2001   | 6/22/2004  | 09/770589          | US | SYSTEM FOR REDUCING TUNING ETCH IN A CLOCK-FORWARDED INTERFACE                                                      |
| 82117589     | Granted | 6462670       | 10/18/2000  | 10/8/2002  | 09/691600          | US | SERVER SYSTEM HAVING FRONT AND REAR IDENTIFICATION                                                                  |
| 82117595     | Granted | 6754084       | 10/18/2000  | 6/22/2004  | 09/691373          | US | SYSTEM FOR MOUNTING PCI CARDS                                                                                       |
| 82117604     | Granted | 6778381       | 10/18/2000  | 8/17/2004  | 09/691603          | US | RETRACTABLE DISPLAY MODULE                                                                                          |
| 82117646     | Granted | 6715057       | 8/31/2000   | 3/30/2004  | 09/652552          | US | EFFICIENT TRANSLATION LOOKASIDE BUFFER MISS PROCESSING IN COMPUTER SYSTEMS WITH A LARGE RANGE OF PAGE SIZES         |
| 82117649     | Granted | 6678840       | 8/31/2000   | 1/13/2004  | 09/651949          | US | FAULT CONTAINMENT AND ERROR RECOVERY IN A SCALABLE MULTIPROCESSOR                                                   |
| 82117652     | Granted | 7152191       | 10/23/2003  | 12/19/2006 | 10/691744          | US | FAULT CONTAINMENT AND ERROR RECOVERY IN A SCALABLE MULTIPROCESSOR                                                   |
| 82117712     | Granted | 6701332       | 7/31/2000   | 3/2/2004   | 09/629066          | US | CLUSTER FILE SYSTEM MULTI-VOLUME ROOT SUPPORT                                                                       |
| 82117724     | Granted | 6799980       | 12/31/2001  | 10/5/2004  | 10/039138          | US | Method And Apparatus For Grounding A Processor Board                                                                |
| 82117727     | Granted | 6662272       | 9/29/2001   | 12/9/2003  | 09/967614          | US | DYNAMIC CACHE PARTITIONING                                                                                          |
| 82117730     | Granted | 6865447       | 12/8/2003   | 3/8/2005   | 10/730761          | US | DYNAMIC CACHE PARTITIONING                                                                                          |
| 82117733     | Granted | 6915446       | 9/29/2001   | 7/5/2005   | 09/967612          | US | SUPPORTING ERROR CORRECTION AND IMPROVING ERROR DETECTION DYNAMICALLY ON THE PCI-X BUS                              |
| 82117778     | Granted | 6598122       | 4/19/2001   | 7/22/2003  | 09/839621          | US | ACTIVE LOAD ADDRESS BUFFER                                                                                          |
| 82117781     | Granted | 6854075       | 4/19/2001   | 2/8/2005   | 09/837995          | US | Simultaneous And Redundantly Threaded Processor Store Instruction Comparator                                        |
| 82117784     | Granted | 6854051       | 4/19/2001   | 2/8/2005   | 09/839459          | US | Cycle Count Replication In A Simultaneous And Redundantly Threaded Processor                                        |
| 82117790     | Granted | 6792525       | 4/19/2001   | 9/14/2004  | 09/838069          | US | Input Replicator For Interrupts In A Simultaneous And Redundantly Threaded Processor                                |
| 82117793     | Granted | 6823473       | 4/19/2001   | 11/23/2004 | 09/839626          | US | Simultaneous And Redundantly Threaded Processor Uncached Load Address Comparator And Data Value Replication Circuit |
| 82117799     | Granted | 6859876       | 12/29/2000  | 2/22/2005  | 09/751187          | US | System And Method For Detecting And Using A Replacement Boot Block During Initialization By An Original Boot Block  |
| 82117850     | Granted | 6771512       | 7/22/2002   | 8/3/2004   | 10/200840          | US | MOUNTING SYSTEM FOR CIRCUIT BOARD                                                                                   |
| 82117904     | Granted | 6665763       | 7/31/2000   | 12/16/2003 | 09/630246          | US | HOT-PLUG STORAGE DRIVE                                                                                              |
| 82117961     | Granted | 6622225       | 8/31/2000   | 9/16/2003  | 09/652325          | US | System For Minimizing Memory Bank Conflicts In A Computer System                                                    |
| 82117964     | Granted | 6754739       | 8/31/2000   | 6/22/2004  | 09/651945          | US | Computer Resource Management And Allocation System                                                                  |
| 82117967     | Granted | 6636955       | 8/31/2000   | 10/21/2003 | 09/652480          | US | MECHANISM FOR SYNCHRONIZING MULTIPLE SKEWED SOURCE-SYNCHRONOUS DATA CHANNELS WITH AUTOMATIC INITIALIZATION FEATURE  |

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| 82118021     | Granted | 6745258       | 8/22/2000   | 6/1/2004   | 09/643633          | US | RAID SYSTEM HAVING MULTIPLE REPLY QUEUES FOR USE WITH MULTIPROCESSOR HOST                                                          |
| 82118024     | Granted | 6725393       | 11/6/2000   | 4/20/2004  | 09/707132          | US | SYSTEM, MACHINE, AND METHOD FOR MAINTENANCE OF MIRRORRED DATASETS THROUGH SURROGATE WRITES DURING STORAGE-AREA NETWORK TRANSIENTS  |
| 82118027     | Granted | 7584377       | 2/20/2004   | 9/1/2009   | 10/783865          | US | SYSTEM, MACHINE, AND METHOD FOR MAINTENANCE OF MIRRORRED DATASETS THROUGH SURROGATE WRITES DURING STORAGE-AREA NETWORK TRANSIENTS  |
| 82118039     | Granted | 6782438       | 8/31/2000   | 8/24/2004  | 09/652641          | US | IO Speed And Length Programmable With Bus Population Partition Formation Using Microprocessors In A Multiprocessor Computer System |
| 82118042     | Granted | 6973517       | 8/31/2000   | 12/6/2005  | 09/652458          | US | System And Method For Increasing The Count Of Outstanding Split Transactions                                                       |
| 82118045     | Granted | 6820165       | 8/31/2001   | 11/16/2004 | 09/944517          | US | SYSTEM AND METHOD FOR PROVIDING FORWARD PROGRESS AND AVOIDING STARVATION AND LIVELOCK IN A MULTIPROCESSOR COMPUTER SYSTEM          |
| 82118048     | Granted | 6647453       | 8/31/2000   | 11/11/2003 | 09/652984          | US | APPARATUS AND METHOD FOR SPECULATIVE PREFETCHING AFTER DATA CACHE MISSES                                                           |
| 82118084     | Granted | 6944718       | 10/24/2003  | 9/13/2005  | 10/693303          | US | SYSTEM AND METHOD FOR GENERATING CACHE COHERENCE DIRECTORY ENTRIES AND ERROR CORRECTION CODES IN A MULTIPROCESSOR SYSTEM           |
| 82118099     | Granted | 6725343       | 10/5/2001   | 4/20/2004  | 09/972477          | US | Ensuring Fairness In A Multiprocessor Environment Using Historical Abuse Recognition In Spinlock Acquisition                       |
| 82118105     | Granted | 6845417       | 1/9/2002    | 1/18/2005  | 10/042999          | US | System And Method Of Measuring Application Resource Usage                                                                          |
| 82118165     | Granted | 8799883       | 1/31/2003   | 8/5/2014   | 10/356304          | US | System And Method Of Automatically Switching Control Of A Bus In A Processor-based Device                                          |
| 82118174     | Granted | 7328290       | 6/1/2001    | 2/5/2008   | 09/872600          | US | Cryptographic Key Setup In Queued Cryptographic Systems                                                                            |
| 82118210     | Granted | 7318160       | 2/1/2002    | 1/8/2008   | 10/062808          | US | LOGICAL ARCHITECTURE FOR BUSINESS-TO-EMPLOYEE WEB SERVICES                                                                         |
| 82118216     | Granted | 7051045       | 5/15/2001   | 5/23/2006  | 09/855878          | US | METHOD OF MIXED WORKLOAD HIGH PERFORMANCE SCHEDULING                                                                               |
| 82118276     | Granted | 6895585       | 3/30/2001   | 5/17/2005  | 09/823837          | US | METHOD AND APPARATUS FOR DISCOVERING COMPUTER SYSTEMS IN A DISTRIBUTED MULTI-SYSTEM CLUSTER                                        |
| 82118339     | Granted | 6977908       | 8/31/2001   | 12/20/2005 | 09/945083          | US | CENTRALIZED CRYPTOGRAPHIC KEY ADMINISTRATION SCHEME FOR ENABLING SECURE CONTEXT-FREE APPLICATION OPERATION                         |
| 82118408     | Granted | 6901512       | 12/12/2000  | 5/31/2005  | 09/736715          | US | VISUAL METER FOR PROVIDING A LONG-TERM INDICATION OF DYNAMIC PARAMETERS                                                            |
| 82118423     | Granted | 6628205       | 10/17/2002  | 9/30/2003  | 10/272845          | US |                                                                                                                                    |

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| 82118465     | Granted | 6892259       | 9/29/2001   | 5/10/2005  | 09/967608          | US | Method And Apparatus For Allocating Computer Bus Device Resources To A Priority Requester And Retrying Requesting From Non-priority Requesters |
| 82118471     | Granted | 6694411       | 9/28/2001   | 2/17/2004  | 09/966503          | US | Technique For Implementing A Distributed Lock In A Processor-Based Device                                                                      |
| 82118477     | Granted | 6697927       | 9/28/2001   | 2/24/2004  | 09/966478          | US | CONCURRENT NON-BLOCKING FIFO ARRAY                                                                                                             |
| 82118582     | Granted | 6725324       | 4/23/2002   | 4/20/2004  | 10/127878          | US | METHOD AND APPARATUS FOR INCREASING FLASH ROM PROGRAMMING PERFORMANCE IN A MULTIPLE PROCESSOR COMPUTER SYSTEM                                  |
| 82118591     | Granted | 7353224       | 12/4/2001   | 4/1/2008   | 10/005193          | US | SYSTEM AND METHOD FOR EFFICIENTLY FINDING NEAR-SIMILAR IMAGES IN MASSIVE DATABASES                                                             |
| 82118651     | Granted | 7558217       | 8/15/2003   | 7/7/2009   | 10/642002          | US | Method And System For Initializing Host Location Information Across Smart Bridge Topology Changes                                              |
| 82118663     | Granted | 7240186       | 7/16/2001   | 7/3/2007   | 09/906345          | US | System And Method To Avoid Resource Contention In The Presence Of Exceptions                                                                   |
| 82119539     | Granted | 5870602       | 1/27/1998   | 2/9/1999   | 09/014369          | US | MULTI-PROCESSOR SYSTEM WITH SYSTEM WIDE RESET AND PARTIAL SYSTEM RESET CAPABILITIES                                                            |
| 82119644     | Granted | 6757689       | 9/7/2001    | 6/29/2004  | 09/948928          | US | ENABLING A ZERO LATENCY ENTERPRISE                                                                                                             |
| 82119722     | Granted | 6760788       | 11/30/2001  | 7/6/2004   | 09/998439          | US | Domain Validation Process That Is Transparent To A Device Driver                                                                               |
| 82119770     | Granted | 6667889       | 1/7/2002    | 12/23/2003 | 10/041010          | US | SYSTEM AND METHOD FOR PIVOTAL INSTALLATION AND REMOVAL OF A CIRCUIT BOARD FROM A CHASSIS                                                       |
| 82119773     | Granted | 6970361       | 10/28/2003  | 11/29/2005 | 10/695202          | US | System And Method For Pivotal Installation And Removal Of A Circuit Board From A Chassis                                                       |
| 82119782     | Granted | 7299345       | 9/28/2001   | 11/20/2007 | 09/966064          | US | RESERVED ROM SPACE FOR STORAGE OF OPERATING SYSTEM DRIVERS                                                                                     |
| 82119833     | Granted | 6785696       | 6/1/2001    | 8/31/2004  | 09/872323          | US | SYSTEM AND METHOD FOR REPLICATION OF DISTRIBUTED DATABASES THAT SPAN MULTIPLE PRIMARY NODES                                                    |
| 82119836     | Granted | 7055139       | 3/28/2002   | 5/30/2006  | 10/109287          | US | MULTIPROCESS DEBUGGING USING MULTIPLE CONVENTIONAL DEBUGGERS                                                                                   |
| 82119848     | Granted | 7003635       | 10/3/2002   | 2/21/2006  | 10/263742          | US | GENERALIZED ACTIVE INHERITANCE CONSISTENCY MECHANISM HAVING LINKED WRITES                                                                      |
| 82119854     | Granted | 6829665       | 9/28/2001   | 12/7/2004  | 09/965871          | US | Next Snoop Predictor In A Host Controller                                                                                                      |
| 82119857     | Granted | 6823409       | 9/28/2001   | 11/23/2004 | 09/965894          | US | Coherency Control Module For Maintaining Cache Coherency In A Multi-Processor-Bus System                                                       |
| 82119893     | Granted | 6884101       | 10/17/2001  | 4/26/2005  | 09/981511          | US | Interposer One-Step Load And Self-Lock Socket                                                                                                  |
| 82119896     | Granted | 6886048       | 11/15/2001  | 4/26/2005  | 10/002809          | US | TECHNIQUES FOR PROCESSING OUT-OF-ORDER REQUESTS IN A PROCESSOR-BASED SYSTEM                                                                    |
| 82119902     | Granted | 6912599       | 10/19/2001  | 6/28/2005  | 10/038231          | US | METHOD AND APPARATUS FOR SENSING POSITIONS OF DEVICE ENCLOSURES WITHIN MULTI-SHELF CABINETS                                                    |

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| 82119905     | Granted | 7886298       | 3/26/2002   | 2/8/2011   | 10/106903          | US | Data Transfer Protocol For Data Replication Between Multiple Pairs Of Storage Controllers On A SAN Fabric                   |
| 82119914     | Granted | 6947981       | 3/26/2002   | 9/20/2005  | 10/106908          | US | FLEXIBLE DATA REPLICATION MECHANISM                                                                                         |
| 82119923     | Granted | 7542987       | 4/21/2005   | 6/2/2009   | 11/111380          | US | AUTOMATIC SITE FAILOVER                                                                                                     |
| 82119956     | Granted | 7028213       | 9/28/2001   | 4/11/2006  | 09/965883          | US | Error Indication In A Raid Memory System                                                                                    |
| 82119977     | Granted | 6985502       | 11/19/2001  | 1/10/2006  | 09/989911          | US | TIME-DIVISION MULTIPLEXED LINK FOR USE IN A SERVICE AREA NETWORK                                                            |
| 82119983     | Granted | 7043647       | 9/28/2001   | 5/9/2006   | 09/966180          | US | Intelligent Power Management For A Rack Of Servers                                                                          |
| 82120022     | Granted | 7856420       | 12/7/2001   | 12/21/2010 | 10/013091          | US | ZERO LATENCY ENTERPRISE ENRICHED PUBLISH/SUBSCRIBE                                                                          |
| 82120103     | Granted | 7149556       | 6/7/2002    | 12/12/2006 | 10/165417          | US | METHOD AND APPARATUS FOR OPTIMIZED BATTERY LIFE AND AUTHENTICATION IN CONTACTLESS TECHNOLOGY                                |
| 82120106     | Granted | 6830394       | 6/4/2001    | 12/14/2004 | 09/873778          | US | KEYBOARD HAVING A TRACK BALL MECHANISM AND A SCROLL MECHANISM                                                               |
| 82120148     | Granted | 8090751       | 2/5/2002    | 1/3/2012   | 10/068466          | US | Operational Data Store                                                                                                      |
| 82120160     | Granted | 6925537       | 10/31/2003  | 8/2/2005   | 10/698130          | US | Multiprocessor Cache Coherence System And Method In Which Processor Nodes And Input/Output Nodes Are Equal Participants     |
| 82120163     | Granted | 6751720       | 1/7/2002    | 6/15/2004  | 10/042054          | US | METHOD AND SYSTEM FOR DETECTING AND RESOLVING VIRTUAL ADDRESS SYNONYMS IN A TWO-LEVEL CACHE HIERARCHY                       |
| 82120166     | Granted | 6646883       | 8/21/2001   | 11/11/2003 | 09/934269          | US | INSERTION LATCH AND ELECTABLE PULL HANDLE FOR RACK MOUNTED ELECTRONIC DEVICES                                               |
| 82120169     | Granted | 6636949       | 1/7/2002    | 10/21/2003 | 10/042008          | US | SYSTEM FOR HANDLING COHERENCE PROTOCOL RACES IN A SCALABLE SHARED MEMORY SYSTEM BASED ON CHIP MULTIPROCESSING               |
| 82120172     | Granted | 6697919       | 6/11/2001   | 2/24/2004  | 09/878985          | US | System And Method For Limited Fanout Daisy Chaining Of Cache Invalidation Requests In A Shared-memory Multiprocessor System |
| 82120214     | Granted | 6870436       | 3/11/2002   | 3/22/2005  | 10/097215          | US | METHOD AND APPARATUS TO ATTENUATE POWER PLANE NOISE ON A PRINTED CIRCUIT BOARD USING HIGH ESR CAPACITORS                    |
| 82120226     | Granted | 6667879       | 12/13/2001  | 12/23/2003 | 10/022744          | US | System For Latching And Ejecting A Modular Component From An Electronic Device                                              |
| 82120409     | Granted | 6782443       | 4/9/2003    | 8/24/2004  | 10/410541          | US | Extension Of USB Functionality Through Shadowing Of A Remote USB Host Controller                                            |
| 82120415     | Granted | 7051239       | 12/28/2001  | 5/23/2006  | 10/034717          | US | METHOD AND APPARATUS FOR EFFICIENTLY IMPLEMENTING TRACE AND/OR LOGIC ANALYSIS MECHANISMS ON A PROCESSOR CHIP                |
| 82120463     | Granted | 6801970       | 9/30/2001   | 10/5/2004  | 09/968056          | US | PRIORITY TRANSACTION SUPPORT ON THE PCI-X BUS                                                                               |

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| 82120466     | Granted | 6871248       | 9/29/2001   | 3/22/2005  | 09/967606          | US | Isosynchronous Transactions For Interconnect Busses Of A Computer System                                                                                                             |
| 82120469     | Granted | 7340545       | 8/15/2005   | 3/4/2008   | 11/203733          | US | Distributed Peer-to-peer Communication For Interconnect Busses Of A Computer System                                                                                                  |
| 82120484     | Granted | 7110413       | 12/31/2001  | 9/19/2006  | 10/038793          | US | DOWNSTREAM BROADCAST PCI SWITCH                                                                                                                                                      |
| 82120529     | Granted | 6724628       | 12/26/2001  | 4/20/2004  | 10/036165          | US | BLINDMATE HEAT SINK ASSEMBLY                                                                                                                                                         |
| 82120532     | Granted | 6829146       | 3/22/2004   | 12/7/2004  | 10/805901          | US | Blindmate Heat Sink Assembly                                                                                                                                                         |
| 82120535     | Granted | 6987672       | 12/1/2004   | 1/17/2006  | 11/000647          | US | Blindmate Heat Sink Assembly                                                                                                                                                         |
| 82120538     | Granted | 6546444       | 11/20/2001  | 4/8/2003   | 09/989051          | US | Tuned Stub, SCSI Topology                                                                                                                                                            |
| 82120541     | Granted | 6895467       | 10/22/2001  | 5/17/2005  | 10/040194          | US | System And Method For Atomizing Storage                                                                                                                                              |
| 82120544     | Granted | 7146460       | 11/2/2004   | 12/5/2006  | 10/979731          | US | Dynamic Spindle Usage Leveling                                                                                                                                                       |
| 82120595     | Granted | 7096306       | 7/31/2002   | 8/22/2006  | 10/209846          | US | DISTRIBUTED SYSTEM WITH CROSS-CONNECT                                                                                                                                                |
| 82120598     | Granted | 6779064       | 1/24/2002   | 8/17/2004  | 10/057404          | US | INTERCONNECT TRANSACTION ALIASING                                                                                                                                                    |
| 82120604     | Granted | 7152174       | 3/6/2003    | 12/19/2006 | 10/382456          | US | System, Method, And Computer Program Product For On-line Replacement Of A Host Bus Adapter                                                                                           |
|              |         |               |             |            |                    |    | METHOD AND APPARATUS FOR OPERATING A SERVER SYSTEM INCLUDING DETERMINING THE POWER SUPPLIED BY ONE OF A PLURALITY OF POWER SUPPLIES BY MEASURING VOLTAGE ON A LOAD SHARE SIGNAL LINE |
| 82120643     | Granted | 7099879       | 4/26/2002   | 8/29/2006  | 10/133166          | US | REAL-TIME MONITORING OF SERVICE PERFORMANCE THROUGH THE USE OF RELATIONAL DATABASE CALCULATION CLUSTERS                                                                              |
| 82120661     | Granted | 6826036       | 6/28/2002   | 11/30/2004 | 10/185530          | US | MODULAR POWER DISTRIBUTION SYSTEM FOR USE IN COMPUTER EQUIPMENT RACKS                                                                                                                |
| 82120664     | Granted | 7215535       | 11/22/2004  | 5/8/2007   | 10/995737          | US | MODULAR POWER DISTRIBUTION SYSTEM FOR USE IN COMPUTER EQUIPMENT RACKS                                                                                                                |
| 82120670     | Granted | 7447975       | 9/12/2002   | 11/4/2008  | 10/243995          | US | Supporting Cyclic Redundancy Checking For PCI-X                                                                                                                                      |
| 82120709     | Granted | 7080142       | 9/20/2002   | 7/18/2006  | 10/251089          | US | EXTENSIBLE COMPUTER MANAGEMENT RULE ENGINE                                                                                                                                           |
| 82120856     | Granted | 5884054       | 1/6/1993    | 3/16/1999  | 08/001091          | US | MULTIPROCESSOR COMMUNICATION USING REDUCED ADDRESSING LINES                                                                                                                          |
| 82121651     | Granted | 7447995       | 6/28/2002   | 11/4/2008  | 10/186114          | US | System And Method For Cursor Calibration                                                                                                                                             |
| 82121654     | Granted | 6918007       | 9/9/2002    | 7/12/2005  | 10/237330          | US | Memory Controller Interface With XOR Operations On Memory Read To Accelerate RAID Operations                                                                                         |
| 82121663     | Granted | 6901458       | 7/11/2002   | 5/31/2005  | 10/192909          | US | Multi-mode SCSI Backplane And Detection Logic                                                                                                                                        |
| 82121711     | Granted | 6889341       | 6/28/2002   | 5/3/2005   | 10/186054          | US | METHOD AND APPARATUS FOR MAINTAINING DATA INTEGRITY USING A SYSTEM MANAGEMENT PROCESSOR                                                                                              |
| 82121714     | Granted | 6968465       | 6/24/2002   | 11/22/2005 | 10/178300          | US | Multiple Server In-Rush Current Reduction                                                                                                                                            |
| 82121717     | Granted | 6687134       | 6/13/2002   | 2/3/2004   | 10/170730          | US | Card Extraction And Separation System                                                                                                                                                |
| 82121774     | Granted | 6792511       | 8/16/2002   | 9/14/2004  | 10/222045          | US | DUAL CACHE MODULE SUPPORT FOR ARRAY CONTROLLER                                                                                                                                       |

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| 82121792     | Granted | 7143275       | 8/1/2002    | 11/28/2006 | 10/210274          | US | SYSTEM FIRMWARE BACK-UP USING A BIOS-ACCESSIBLE BOOT PARTITION                                                                         |
| 82121795     | Granted | 6768295       | 5/30/2002   | 7/27/2004  | 10/158336          | US | Offset Calibration Of Current Sharing Signal For Power Supplies In Redundant Operation                                                 |
| 82121837     | Granted | 7105950       | 9/26/2003   | 9/12/2006  | 10/672522          | US | Power Management In A System Having A Plurality Of Power Supplies                                                                      |
| 82121840     | Granted | 7502895       | 9/13/2005   | 3/10/2009  | 11/225937          | US | Techniques For Reducing Castouts In A Snoop Filter                                                                                     |
| 82121852     | Granted | 7739485       | 10/11/2002  | 6/15/2010  | 10/269195          | US | CACHED FIELD REPLACEABLE UNIT EEPROM DATA                                                                                              |
| 82121855     | Granted | 6735097       | 12/19/2002  | 5/11/2004  | 10/324542          | US | Method And Apparatus Of Using Leakage Inductance As Boost Inductor                                                                     |
| 82121894     | Granted | 7193971       | 6/24/2002   | 3/20/2007  | 10/178716          | US | ACTIVE PATH SELECTION FOR SCTP                                                                                                         |
| 82121897     | Granted | 7028215       | 6/25/2002   | 4/11/2006  | 10/178981          | US | HOT MIRRORING IN A COMPUTER SYSTEM WITH REDUNDANT MEMORY SUBSYSTEMS                                                                    |
| 82121900     | Granted | 7397314       | 9/11/2002   | 7/8/2008   | 10/241014          | US | Redundant Clock Source                                                                                                                 |
| 82122038     | Granted | 7392384       | 6/28/2002   | 6/24/2008  | 10/187266          | US | Method And System For Secure Storage, Transmission And Control Of Cryptographic Keys                                                   |
| 82122080     | Granted | 8135132       | 12/23/2009  | 3/13/2012  | 12/645516          | US | Method And System For Secure Storage, Transmission And Control Of Cryptographic Keys                                                   |
| 82122095     | Granted | 7317623       | 12/20/2002  | 1/8/2008   | 10/324945          | US | Swappable Mount For Cable Support And System And Method Incorporating Same                                                             |
| 82126892     | Granted | 5809560       | 10/13/1995  | 9/15/1998  | 08/543067          | US | ADAPTIVE READ-AHEAD DISK CACHE                                                                                                         |
| 82126898     | Granted | 5961652       | 6/23/1997   | 10/5/1999  | 08/879667          | US | READ CHECKING FOR DRIVE REBUILD                                                                                                        |
| 82126901     | Granted | 5822584       | 10/13/1995  | 10/13/1998 | 08/542800          | US | USER SELECTABLE PRIORITY FOR DISK ARRAY BACKGROUND OPERATIONS                                                                          |
| 82126913     | Granted | 5717954       | 10/13/1995  | 2/10/1998  | 08/542801          | US | LOCKED EXCHANGE FIFO                                                                                                                   |
| 82126949     | Granted | 5692200       | 10/16/1995  | 11/25/1997 | 08/543724          | US | BRIDGE CIRCUIT FOR PREVENTING DATA INCOHERENCY BY HOLDING OFF PROPAGATION                                                              |
| 82126952     | Granted | 5721839       | 10/13/1995  | 2/24/1998  | 08/542882          | US | APPARATUS AND METHOD FOR SYNCHRONOUSLY PROVIDING A FULLNESS INDICATION OF A DUAL PORTED BUFFER SITUATED BETWEEN TWO ASYNCHRONOUS BUSES |
| 82126961     | Granted | 5815677       | 12/31/1996  | 9/29/1998  | 08/774746          | US | BUFFER RESERVATION METHOD FOR A BUS BRIDGE SYSTEM                                                                                      |
| 82126964     | Granted | 6260095       | 9/29/1998   | 7/10/2001  | 09/162924          | US | BUFFER RESERVATION METHOD FOR A BUS BRIDGE SYSTEM                                                                                      |
| 82127030     | Granted | 5797018       | 12/7/1995   | 8/18/1998  | 08/568478          | US | APPARATUS AND METHOD OF PREVENTING A DEADLOCK CONDITION IN A COMPUTER SYSTEM                                                           |
| 82127033     | Granted | 5673172       | 1/5/1996    | 9/30/1997  | 08/583415          | US | APPARATUS FOR ELECTROMAGNETIC INTERFERENCE AND ELECTROSTATIC DISCHARGE SHIELDING OF HOT PLUG-CONNECTED HARD DISK DRIVES                |

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| 82127219     | Granted | 5673171       | 12/5/1995   | 9/30/1997  | 08/567566          | US | HARD DISC DRIVE SUPPORT TRAY APPARATUS WITH BUSHING                                                                                                        |
|              |         |               |             |            |                    |    | HANDLING SHOCK REDUCTION, EMI SHIELDING AND MOUNTING ALIGNMENT STRUCTURES                                                                                  |
| 82127222     | Granted | 5864710       | 7/22/1996   | 1/26/1999  | 08/685310          | US | CONTROLLERLESS MODEM                                                                                                                                       |
| 82127225     | Granted | 6112260       | 1/31/1997   | 8/29/2000  | 08/791590          | US | METHOD AND APPARATUS FOR REDIRECTING INPUT/OUTPUT DEVICE DATA IN A COMPUTER SYSTEM THROUGH USE OF DEBUG REGISTERS                                          |
| 82127261     | Granted | 5691870       | 11/7/1995   | 11/25/1997 | 08/551787          | US | CIRCUIT FOR MONITORING AND DISABLING POWER SUPPLY SIGNALS TO A MICROPROCESSOR IN A COMPUTER SYSTEM UTILIZING SECONDARY VOLTAGE REGULATORS                  |
| 82127264     | Granted | 5970236       | 11/14/1995  | 10/19/1999 | 08/557487          | US | CIRCUIT FOR SELECTIVELY PERFORMING DATA FORMAT CONVERSION                                                                                                  |
| 82127324     | Granted | 5838993       | 4/26/1996   | 11/17/1998 | 08/639879          | US | SYSTEM FOR DMA CONTROLLER SHARING CONTROL SIGNALS IN CONVENTIONAL MODE AND HAVING SEPARATE CONTROL SIGNALS FOR EACH NUMBER OF CHANNELS IN DISTRIBUTED MODE |
| 82127462     | Granted | 5805903       | 5/21/1996   | 9/8/1998   | 08/651049          | US | PROTECTION OF COMPUTER SYSTEM AGAINST INCORRECT CARD INSERTION DURING START-UP                                                                             |
| 82127465     | Granted | 5774736       | 12/15/1995  | 6/30/1998  | 08/572794          | US | REDUNDANT CPU POWER SYSTEM                                                                                                                                 |
| 82127468     | Granted | 5659789       | 12/15/1995  | 8/19/1997  | 08/573963          | US | STOPCLOCK TOGGLE SYSTEM FOR POWERING TWO CPUS FROM A REGULATOR ONLY SIZED FOR ONE CPU                                                                      |
| 82127474     | Granted | 5784599       | 12/15/1995  | 7/21/1998  | 08/572957          | US | METHOD AND APPARATUS FOR ESTABLISHING HOST BUS CLOCK FREQUENCY AND PROCESSOR CORE CLOCK RATIOS IN A MULTI-PROCESSOR COMPUTER SYSTEM                        |
| 82127573     | Granted | 6021466       | 3/14/1996   | 2/1/2000   | 08/615401          | US | TRANSFERRING DATA BETWEEN CACHES IN A MULTIPLE PROCESSOR ENVIRONMENT                                                                                       |
| 82127579     | Granted | 5898861       | 10/18/1996  | 4/27/1999  | 08/733521          | US | TRANSPARENT KEYBOARD HOT PLUG                                                                                                                              |
| 82127588     | Granted | 5790895       | 10/18/1996  | 8/4/1998   | 08/733415          | US | MODEM SHARING                                                                                                                                              |
| 82127636     | Granted | 6032271       | 6/5/1996    | 2/29/2000  | 08/658750          | US | METHOD AND APPARATUS FOR IDENTIFYING FAULTY DEVICES IN A COMPUTER SYSTEM                                                                                   |
| 82127660     | Granted | 6021480       | 5/14/1998   | 2/1/2000   | 08/658752          | US | ALIGNING A MEMORY READ REQUEST WITH A CACHE LINE BOUNDARY WHEN THE REQUEST IS FOR DATA BEGINNING AT A LOCATION IN THE MIDDLE OF THE CACHE LINE             |
| 82127705     | Granted | 6055596       | 6/5/1996    | 4/25/2000  | 08/658603          | US | EXPANSION CARD SPACE RESERVATION                                                                                                                           |
| 82127723     | Granted | 5911055       | 6/5/1996    | 6/8/1999   | 08/658634          | US | USING SUBORDINATE BUS DEVICES THAT ARE CONNECTED TO A COMMON BUS                                                                                           |
| 82127762     | Granted | 5872939       | 6/5/1996    | 2/16/1999  | 08/658485          | US | BUS ARBITRATION                                                                                                                                            |
| 82127771     | Granted | 6024486       | 6/5/1996    | 2/15/2000  | 08/658732          | US | DATA ERROR DETECTION AND CORRECTION                                                                                                                        |
| 82127774     | Granted | 5809534       | 6/13/1996   | 9/15/1998  | 08/662491          | US | PERFORMING A WRITE CYCLE TO MEMORY IN A MULTI-PROCESSOR SYSTEM                                                                                             |

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| 82127780     | Granted | 6000040       | 10/29/1996  | 12/7/1999  | 08/739687          | US | METHOD AND APPARATUS FOR DIAGNOSING FAULT STATES IN A COMPUTER SYSTEM                                                                           |
| 82127897     | Granted | 6772204       | 10/5/1998   | 8/3/2004   | 09/166677          | US | METHOD AND APPARATUS FOR PROVIDING A WINDOW-BASED GUIDED CONFIGURATION USER INTERFACE OF UNCONFIGURED NETWORK AND INTERNETWORK REMOTE DEVICES   |
| 82127906     | Granted | 5838907       | 2/20/1996   | 11/17/1998 | 08/603062          | US | CONFIGURATION MANAGER FOR NETWORK DEVICES AND ASSOCIATED METHOD FOR PROVIDING CONFIGURATION INFORMATION THERETO                                 |
| 82127951     | Granted | 5914963       | 6/21/1996   | 6/22/1999  | 08/667618          | US | CLOCK SKEW REDUCTION                                                                                                                            |
| 82127954     | Granted | 6138192       | 12/31/1996  | 10/24/2000 | 08/777575          | US | DELIVERING A REQUEST TO WRITE OR READ DATA BEFORE DELIVERING AN EARLIER WRITE REQUEST                                                           |
| 82127957     | Granted | 6070209       | 11/19/1998  | 5/30/2000  | 09/196373          | US | DELIVERING TRANSACTIONS BETWEEN DATA BUSES IN A COMPUTER SYSTEM.                                                                                |
| 82128017     | Granted | 6476854       | 10/18/1996  | 11/5/2002  | 08/733254          | US | VIDEO EAVESDROPPING AND REVERSE ASSEMBLY TO TRANSMIT VIDEO ACTION TO A REMOTE CONSOLE                                                           |
| 82128086     | Granted | 5822300       | 4/2/1996    | 10/13/1998 | 08/627692          | US | CONGESTION MANAGEMENT SCHEME                                                                                                                    |
| 82128089     | Granted | 5787084       | 6/5/1996    | 7/28/1998  | 08/658742          | US | MULTICAST DATA COMMUNICATION SWITCHING SYSTEM AND ASSOCIATED METHOD                                                                             |
| 82128092     | Granted | 6076139       | 9/30/1997   | 6/13/2000  | 08/940914          | US | MULTIMEDIA COMPUTER ARCHITECTURE WITH MULTI-CHANNEL CONCURRENT MEMORY ACCESS                                                                    |
| 82128197     | Granted | 5819053       | 6/5/1996    | 10/6/1998  | 08/658696          | US | COMPUTER SYSTEM BUS PERFORMANCE MONITORING                                                                                                      |
| 82128227     | Granted | 6052513       | 6/5/1996    | 4/18/2000  | 08/659355          | US | MULTI-THREADED BUS MASTER                                                                                                                       |
| 82128332     | Granted | 5761030       | 6/19/1996   | 6/2/1998   | 08/666812          | US | ELECTRONIC DEVICE WITH CIRCUIT BOARD LATCHING AND RETAINING STRUCTURE                                                                           |
| 82128476     | Granted | 5772448       | 4/2/1996    | 6/30/1998  | 08/631606          | US | EDGECARD CIRCUIT BOARD                                                                                                                          |
| 82128572     | Granted | 5852720       | 8/16/1996   | 12/22/1998 | 08/695828          | US | SYSTEM FOR STORING DISPLAY DATA DURING FIRST TIME PERIOD PRIOR TO FAILURE OF COMPUTER AND DURING SECOND TIME PERIOD AFTER RESET OF THE COMPUTER |
| 82128575     | Granted | 6173340       | 10/9/1998   | 1/9/2001   | 09/169316          | US | SERVER CONTROLLER FOR STORING AND RETRIEVING SEQUENCES OF VIDEO SCREENS FORWARDED BY A SERVER HOST COMPUTER                                     |
| 82128596     | Granted | 5857074       | 8/16/1996   | 1/5/1999   | 08/695827          | US | SERVER CONTROLLER RESPONSIVE TO VARIOUS COMMUNICATION PROTOCOLS FOR ALLOWING REMOTE COMMUNICATION TO A HOST COMPUTER CONNECTED THERETO          |
| 82128635     | Granted | 6081865       | 2/17/1999   | 6/27/2000  | 09/251960          | US | ISOLATION OF PCI AND EISA MASTERS BY MASKING CONTROL AND INTERRUPT LINES                                                                        |
| 82128644     | Granted | 5864553       | 12/31/1996  | 1/26/1999  | 08/775770          | US | PCI HOT SPARE CAPABILITY FOR FAILED COMPONENTS                                                                                                  |
| 82128647     | Granted | 6105146       | 1/6/1999    | 8/15/2000  | 09/226359          | US | PCI HOT SPARE CAPABILITY FOR FAILED COMPONENTS                                                                                                  |

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| 82128650     | Granted | 5907689       | 12/31/1996  | 5/25/1999  | 08/777826          | US | MASTER-TARGET BASED ARBITRATION PRIORITY                                                                                                                            |
| 82128653     | Granted | 5850559       | 8/7/1996    | 12/15/1998 | 08/693458          | US | METHOD AND APPARATUS FOR SECURE EXECUTION OF SOFTWARE PRIOR TO A COMPUTER SYSTEM BEING POWERED DOWN OR ENTERING A LOW ENERGY CONSUMPTION MODE                       |
| 82128704     | Granted | 5757795       | 5/20/1996   | 5/26/1998  | 08/650456          | US | METHOD AND APPARATUS FOR HASHING ADDRESSES IN A NETWORK SWITCH                                                                                                      |
| 82128710     | Granted | 5913037       | 7/3/1996    | 6/15/1999  | 08/675582          | US | DYNAMIC MANAGEMENT INFORMATION BASE MANAGEMENT                                                                                                                      |
| 82128713     | Granted | 5819115       | 6/28/1996   | 10/6/1998  | 08/672648          | US | A DRIVER BUNDLE INCLUDING A COMPRESSED, SELF-EXTRACTING, EXECUTABLE DRIVER FOR THE HOST PROCESSOR AND AN ADAPTER DRIVER FOR THE PROCESSOR OF A NETWORK ADAPTER CARD |
| 82128716     | Granted | 5764896       | 6/28/1996   | 6/9/1998   | 08/671583          | US | METHOD AND SYSTEM FOR REDUCING TRANSFER LATENCY WHEN TRANSFERRING DATA FROM A NETWORK TO A COMPUTER SYSTEM                                                          |
| 82128719     | Granted | 5905874       | 4/22/1998   | 5/18/1999  | 09/064432          | US | METHOD AND SYSTEM FOR REDUCING DATA TRANSFER LATENCY WHEN TRANSFERRING DATA FROM A NETWORK TO A COMPUTER SYSTEM                                                     |
| 82128722     | Granted | 6260073       | 12/30/1996  | 7/10/2001  | 08/774605          | US | NETWORK SWITCH INCLUDING A SWITCH MANAGER FOR PERIODICALLY POLLING THE NETWORK PORTS TO DETERMINE THEIR STATUS AND CONTROLLING THE FLOW OF DATA BETWEEN PORTS       |
| 82128758     | Granted | 6098109       | 12/30/1996  | 8/1/2000   | 08/774601          | US | PROGRAMMABLE ARBITRATION SYSTEM FOR DETERMINING PRIORITY OF THE PORTS OF A NETWORK SWITCH                                                                           |
| 82128770     | Granted | 5862338       | 12/30/1996  | 1/19/1999  | 08/774602          | US | POLLING SYSTEM THAT DETERMINES THE STATUS OF NETWORK PORTS AND THAT STORES VALUES INDICATIVE THEREOF                                                                |
| 82128788     | Granted | 6094434       | 12/30/1996  | 7/25/2000  | 08/774555          | US | NETWORK SWITCH WITH SEPARATE CUT-THROUGH BUFFER                                                                                                                     |
| 82128821     | Granted | 6430626       | 8/1/2000    | 8/6/2002   | 09/630415          | US | NETWORK SWITCH WITH A MULTIPLE BUS STRUCTURE AND A BRIDGE INTERFACE FOR TRANSFERRING NETWORK DATA BETWEEN DIFFERENT BUSES                                           |
| 82128851     | Granted | 7333485       | 9/23/1997   | 2/19/2008  | 10/667649          | US | NETWORK COMMUNICATION DEVICE INCLUDING BONDED PORTS FOR INCREASED BANDWIDTH                                                                                         |
| 82128884     | Granted | 5867676       | 8/20/1996   | 2/2/1999   | 08/699918          | US | RESET CIRCUIT FOR A PERIPHERAL COMPONENT INTERCONNECT                                                                                                               |
| 82128893     | Granted | 5907687       | 8/22/1996   | 5/25/1999  | 08/701721          | US | POWER SHUTDOWN APPARATUS                                                                                                                                            |
| 82128896     | Granted | 5832236       | 5/20/1996   | 11/3/1998  | 08/650949          | US | HIGH SPEED FRAME TRANSLATION FOR COMPUTER NETWORKS                                                                                                                  |

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| 82128959     | Granted     | 5867645       | 9/30/1996   | 2/2/1999   | 08/723767          | US | EXTENDED-BUS FUNCTIONALITY IN CONJUNCTION WITH AN<br>EXTENDED-BUS FUNCTIONALITY IN THE SAME BUS SYSTEM                                           |
| 82129016     | Granted     | 5913034       | 8/27/1996   | 6/15/1999  | 08/709208          | US | ADMINISTRATOR STATION FOR A COMPUTER SYSTEM                                                                                                      |
| 82129022     | Granted     | 5974438       | 12/31/1996  | 10/26/1999 | 08/775144          | US | SCOREBOARD FOR CACHED MULTI-THREAD PROCESSES                                                                                                     |
| 82129208     | Granted     | 5867675       | 8/6/1996    | 2/2/1999   | 08/692488          | US | APPARATUS AND METHOD FOR COMBINING DATA STREAMS<br>WITH PROGRAMMABLE WAIT STATES                                                                 |
| 82129259     | Granted     | 5922060       | 12/31/1996  | 7/13/1999  | 08/775133          | US | EXPANSION CARD INSERTION AND REMOVAL                                                                                                             |
| 82129346     | Granted     | 6310782       | 10/31/1996  | 10/30/2001 | 08/741699          | US | AN APPARATUS FOR MAXIMIZING MEMORY DENSITY WITHIN<br>EXISTING COMPUTER SYSTEM FORM FACTORS                                                       |
| 82129445     | Granted     | 6085274       | 3/2/1999    | 7/4/2000   | 09/260962          | US | COMPUTER SYSTEM WITH BRIDGES HAVING POSTED<br>MEMORY WRITE BUFFERS                                                                               |
| 82129448     | Granted     | 5832243       | 12/31/1996  | 11/3/1998  | 08/775301          | US | COMPUTER SYSTEM IMPLEMENTING A STOP CLOCK<br>ACKNOWLEDGE SPECIAL CYCLE                                                                           |
| 82129457     | Granted     | 6148359       | 11/5/1998   | 11/14/2000 | 09/186597          | US | BUS-TO-BUS BRIDGE IN COMPUTER SYSTEM, WITH FAST<br>BURST MEMORY RANGE                                                                            |
| 82129460     | Granted     | RE37980       | 11/3/2000   | 2/4/2003   | 09/706883          | US | BUS-TO-BUS BRIDGE IN COMPUTER SYSTEM, WITH FAST<br>BURST MEMORY RANGE                                                                            |
| 82129463     | Application |               | 4/5/1999    |            | 08/775128          | US | COMPUTER SYSTEM WITH DELAYED TRANSACTION<br>PROCESSING                                                                                           |
| 82129466     | Granted     | 5959841       | 12/31/1996  | 9/28/1999  | 08/777816          | US | MODULAR COMPUTER CHASSIS WITH EXTRACTOR DEVICE<br>MOUNTED TO THE HOUSING                                                                         |
| 82129469     | Granted     | 5923754       | 5/2/1997    | 7/13/1999  | 08/850729          | US | COPY PROTECTION FOR RECORDED MEDIA                                                                                                               |
| 82129472     | Granted     | 5974250       | 6/18/1999   | 10/26/1999 | 08/764177          | US | SYSTEM AND METHOD FOR SECURE INFORMATION<br>TRANSMISSION OVER A NETWORK                                                                          |
| 82129514     | Granted     | 5870567       | 12/31/1996  | 2/9/1999   | 08/775300          | US | DELAYED TRANSACTION PROTOCOL FOR COMPUTER SYSTEM<br>BUS                                                                                          |
| 82129517     | Granted     | 5878232       | 12/27/1996  | 3/2/1999   | 08/775021          | US | DYNAMIC RECONFIGURATION OF NETWORK DEVICE'S<br>VIRTUAL LANS USING THE ROOT IDENTIFIERS AND ROOT<br>PORTS DETERMINED BY A SPANNING TREE PROCEDURE |
| 82129637     | Granted     | 6014383       | 2/10/1997   | 1/11/2000  | 08/797129          | US | SYSTEM AND METHOD FOR CONTROLLING MULTIPLE<br>INITIATORS IN A FIBRE CHANNEL ENVIRONMENT                                                          |
| 82129646     | Granted     | 5944798       | 2/19/1997   | 8/31/1999  | 08/802673          | US | SYSTEM AND METHOD FOR ARBITRATED LOOP RECOVERY                                                                                                   |
| 82129649     | Granted     | 6126451       | 8/18/1999   | 10/3/2000  | 08/867102          | US | SCSI CONNECTOR                                                                                                                                   |
| 82129655     | Granted     | 6654829       | 9/30/2002   | 11/25/2003 | 10/260932          | US | SCSI Connector                                                                                                                                   |
| 82129658     | Granted     | 5946495       | 4/8/1997    | 8/31/1999  | 08/838366          | US | DATA COMMUNICATION CIRCUIT FOR CONTROLLING DATA<br>COMMUNICATION BETWEEN REDUNDANT POWER SUPPLIES<br>AND PERIPHERAL DEVICES                      |

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| 82129661     | Granted | 5937173       | 6/12/1997   | 8/10/1999  | 08/873420          | US | DUAL PURPOSE COMPUTER BRIDGE INTERFACE FOR ACCELERATED GRAPHICS PORT OR REGISTERED PERIPHERAL COMPONENT INTERCONNECT DEVICES                                           |
| 82129706     | Granted | 5999743       | 9/9/1997    | 12/7/1999  | 08/926422          | US | SYSTEM AND METHOD FOR DYNAMICALLY ALLOCATING ACCELERATED GRAPHICS PORT MEMORY SPACE                                                                                    |
| 82129709     | Granted | 5914727       | 9/9/1997    | 6/22/1999  | 08/925773          | US | VALID FLAG FOR DISABLING ALLOCATION OF ACCELERATED GRAPHICS PORT MEMORY SPACE                                                                                          |
| 82129715     | Granted | 5936640       | 9/30/1997   | 8/10/1999  | 08/941862          | US | ACCELERATED GRAPHICS PORT MEMORY MAPPED STATISTICS AND CONTROL REGISTERS                                                                                               |
| 82129718     | Granted | 5914730       | 9/9/1997    | 6/22/1999  | 08/926421          | US | SYSTEM AND METHOD FOR INVALIDATING AND UPDATING INDIVIDUAL GART TABLE ENTRIES FOR ACCELERATED GRAPHICS PORT TRANSACTION REQUESTS                                       |
| 82129763     | Granted | 5805428       | 12/20/1996  | 9/8/1998   | 08/771569          | US | TRANSISTOR/RESISTOR PRINTED CIRCUIT BOARD LAYOUT                                                                                                                       |
| 82129772     | Granted | 5861764       | 12/31/1996  | 1/19/1999  | 08/775771          | US | CLOCK SKEW REDUCTION USING SPIDER CLOCK TRACE ROUTING                                                                                                                  |
| 82129838     | Granted | 6092169       | 4/2/1997    | 7/18/2000  | 08/832367          | US | APPARATUS AND METHOD FOR STORAGE SUBSYSTEM DRIVE MOVEMENT AND VOLUME ADDITION                                                                                          |
| 82129946     | Granted | 6073188       | 7/25/1997   | 6/6/2000   | 08/900676          | US | ELECTRONIC SWITCHBOX FOR SELECTION AND SHARING OF INTERNAL PERIPHERAL DEVICES AMONG DIFFERENT COMPUTERS, THE INTERNAL PERIPHERAL DEVICES LOCATED IN SLOTS OF A CHASSIS |
| 82129955     | Granted | 6061754       | 5/20/1999   | 36655      | 08/882615          | US | DATA BUS HAVING SWITCH FOR SELECTIVELY CONNECTING AND DISCONNECTING DEVICES TO OR FROM THE BUS                                                                         |
| 82129958     | Granted | 6073196       | 6/30/1997   | 6/6/2000   | 08/885110          | US | USING COMMUNICATION CYCLES FOR CONNECTING AND DISCONNECTING DEVICES IN A COMPUTER SYSTEM                                                                               |
| 82129961     | Granted | 6003144       | 6/30/1997   | 12/14/1999 | 08/860029          | US | ERROR DETECTION AND CORRECTION                                                                                                                                         |
| 82129964     | Granted | 6098137       | 6/25/1997   | 8/1/2000   | 08/882504          | US | FAULT TOLERANT COMPUTER SYSTEM                                                                                                                                         |
| 82129973     | Granted | 6466996       | 9/14/1998   | 10/15/2002 | 09/153211          | US | METHOD AND SYSTEM FOR IMPLEMENTING INTELLIGENT DISTRIBUTED INPUT-OUTPUT PROCESSING AS A SOFTWARE PROCESS IN A HOST OPERATING SYSTEM ENVIRONMENT                        |
| 82130069     | Granted | 6441861       | 5/7/2001    | 8/27/2002  | 09/850220          | US | COMPUTER CONVERGENCE DEVICE CONTROLLER FOR MANAGING DISPARATE VIDEO SOURCES                                                                                            |
| 82130135     | Granted | 5905497       | 3/31/1997   | 5/18/1999  | 08/828525          | US | AUTOMATIC AND SEAMLESS CURSOR AND POINTER INTEGRATION                                                                                                                  |
| 82130144     | Granted | 5905509       | 9/30/1997   | 5/18/1999  | 08/941860          | US | ACCELERATED GRAPHICS PORT TWO LEVEL GART CACHE HAVING DISTRIBUTED FIRST LEVEL CACHES                                                                                   |

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| 82130147     | Granted | 6101559       | 10/22/1997  | 8/8/2000   | 08/955790          | US | SYSTEM FOR IDENTIFYING THE PHYSICAL LOCATION OF ONE OR MORE PERIPHERAL DEVICES BY SELECTING ICONS ON A DISPLAY REPRESENTING THE ONE OR MORE PERIPHERAL DEVICES     |
| 82130150     | Granted | 6205500       | 9/24/1997   | 3/20/2001  | 08/936208          | US | SYSTEM AND METHOD FOR ELECTRONICALLY ISOLATING A DEVICE FROM HIGHER VOLTAGE DEVICES                                                                                |
| 82130159     | Granted | 6341342       | 11/4/1997   | 1/22/2002  | 08/963862          | US | METHOD AND APPARATUS FOR ZEROING A TRANSFER BUFFER MEMORY AS A BACKGROUND TASK                                                                                     |
| 82130162     | Granted | 6772310       | 12/4/2001   | 8/3/2004   | 10/006553          | US | METHOD AND APPARATUS FOR ZEROING A TRANSFER BUFFER MEMORY AS A BACKGROUND TASK                                                                                     |
| 82130195     | Granted | 6061794       | 9/30/1997   | 5/9/2000   | 08/940551          | US | SYSTEM AND METHOD FOR PERFORMING SECURE DEVICE COMMUNICATIONS IN A PEER-TO-PEER BUS ARCHITECTURE                                                                   |
| 82130336     | Granted | 6067590       | 6/12/1997   | 5/23/2000  | 08/873636          | US | DATA BUS AGENT INCLUDING A STORAGE MEDIUM BETWEEN A DATA BUS AND THE BUS AGENT DEVICE                                                                              |
| 82130390     | Granted | 5938772       | 6/11/1997   | 8/17/1999  | 08/872715          | US | RESPONSIVE BACKLIT HARDWARE BUTTON ARRAY PROVIDING ILLUMINATION AND USER FEEDBACK IN A COMPUTER                                                                    |
| 82130573     | Granted | 6137678       | 10/4/1999   | 10/24/2000 | 08/941409          | US | CONFIGURING A COMPUTER SYSTEM                                                                                                                                      |
| 82130639     | Granted | 5867444       | 9/25/1997   | 2/2/1999   | 08/937535          | US | PROGRAMMABLE MEMORY DEVICE THAT SUPPORTS MULTIPLE OPERATIONAL MODES                                                                                                |
| 82130642     | Granted | 5922080       | 9/30/1997   | 7/13/1999  | 08/940054          | US | METHOD AND APPARATUS FOR PERFORMING ERROR DETECTION AND CORRECTION WITH MEMORY DEVICES                                                                             |
| 82130651     | Granted | 6098132       | 9/30/1997   | 8/1/2000   | 08/940419          | US | INSTALLATION AND REMOVAL OF COMPONENTS OF A COMPUTER                                                                                                               |
| 82130654     | Granted | 6047343       | 4/3/1999    | 4/4/2000   | 09/307254          | US | METHOD AND APPARATUS FOR DETECTING INSERTION AND REMOVAL OF A MEMORY MODULE USING STANDARD CONNECTORS                                                              |
| 82130657     | Granted | 6587909       | 3/6/2000    | 7/1/2003   | 09/519138          | US | INSTALLATION AND REMOVAL OF COMPONENTS OF A COMPUTER                                                                                                               |
| 82130660     | Granted | 6010345       | 8/8/1997    | 1/4/2000   | 08/910954          | US | LEVERAGED APPARATUS FOR SELECTIVELY DECOUPLING EITHER OF TWO PERPENDICULARLY COUPLED CIRCUIT BOARDS FROM THE OTHER CIRCUIT BOARD                                   |
| 82130696     | Granted | 5948081       | 12/22/1997  | 9/7/1999   | 08/995367          | US | SYSTEM FOR FLUSHING QUEUED MEMORY WRITE REQUEST CORRESPONDING TO A QUEUED READ REQUEST AND ALL PRIOR WRITE REQUESTS WITH COUNTER INDICATING REQUESTS TO BE FLUSHED |
| 82130948     | Granted | 5918059       | 8/15/1997   | 6/29/1999  | 08/911648          | US | METHOD AND APPARATUS FOR RESPONDING TO ACTUATION OF A POWER SUPPLY SWITCH FOR A COMPUTING SYSTEM                                                                   |

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| 82130951     | Granted | 5938751       | 8/15/1997   | 8/17/1999  | 08/912092          | US | BUS RING-BACK AND VOLTAGE OVER-SHOOT REDUCTION TECHNIQUES COUPLED WITH HOT-PLUGGABILITY                                                                                   |
| 82130960     | Granted | 5909584       | 8/15/1997   | 6/1/1999   | 08/911250          | US | POWER INTERLOCK WITH FAULT INDICATORS FOR COMPUTER SYSTEM                                                                                                                 |
| 82131206     | Granted | 6122287       | 2/9/1996    | 9/19/2000  | 08/599183          | US | METHOD AND APPARATUS FOR DETECTING SWITCHED NETWORK PROTOCOLS                                                                                                             |
| 82131263     | Granted | 6119228       | 8/22/1997   | 9/12/2000  | 08/916273          | US | METHOD FOR SECURELY COMMUNICATING REMOTE CONTROL COMMANDS IN A COMPUTER NETWORK                                                                                           |
| 82131272     | Granted | 6223301       | 9/30/1997   | 4/24/2001  | 08/940282          | US | FAULT TOLERANT MEMORY                                                                                                                                                     |
| 82131275     | Granted | 6430702       | 11/15/2000  | 8/6/2002   | 09/713738          | US | FAULT TOLERANT MEMORY                                                                                                                                                     |
| 82131278     | Granted | 7409581       | 8/5/2002    | 8/5/2008   | 10/212603          | US | MAIN MEMORY CONTROLLER ADAPTED TO CORRECT CORRUPTED DATA BY XORING CORRUPTED DATA TO DIRECTLY GENERATE CORRECT DATA                                                       |
| 82131392     | Granted | 6675248       | 10/3/2000   | 1/6/2004   | 09/678034          | US | APPARATUS, METHOD AND SYSTEM FOR ACCELERATED GRAPHICS PORT BUS BRIDGES                                                                                                    |
| 82131398     | Granted | 5986677       | 9/30/1997   | 11/16/1999 | 08/941859          | US | ACCELERATED GRAPHICS PORT READ TRANSACTION MERGING                                                                                                                        |
| 82131407     | Granted | 6442631       | 5/7/1999    | 8/27/2002  | 09/306878          | US | ALLOCATING SYSTEM RESOURCES BASED UPON PRIORITY                                                                                                                           |
| 82131512     | Granted | 6360333       | 11/19/1998  | 3/19/2002  | 09/196463          | US | METHOD AND APPARATUS FOR DETERMINING A PROCESSOR FAILURE IN A MULTIPROCESSOR COMPUTER                                                                                     |
| 82131575     | Granted | 6260158       | 5/11/1998   | 7/10/2001  | 09/075623          | US | SYSTEM AND METHOD FOR FAIL-OVER DATA TRANSPORT                                                                                                                            |
| 82131578     | Granted | 6389555       | 4/23/2001   | 5/14/2002  | 09/840671          | US | SYSTEM AND METHOD FOR FAIL-OVER DATA TRANSPORT                                                                                                                            |
| 82131584     | Granted | 6173373       | 10/15/1998  | 1/9/2001   | 09/173597          | US | METHOD AND APPARATUS FOR IMPLEMENTING STABLE PRIORITY QUEUES USING CONCURRENT NON-BLOCKING QUEUING TECHNIQUES                                                             |
| 82131635     | Granted | 6141708       | 6/15/1998   | 10/31/2000 | 09/098015          | US | HOST BRIDGE CONFIGURED TO MASK A PORTION OF PERIPHERAL DEVICES COUPLED TO A BUS FURTHER DOWNSTREAM OF THE HOST BRIDGE FROM A HOST PROCESSOR                               |
| 82131647     | Granted | 6052749       | 11/14/1997  | 4/18/2000  | 08/970367          | US | SYSTEM FOR FORMING AN INTELLIGENT I/O (I2O)-AWARE DEVICE BY CONNECTING BOTH A PERIPHERAL CONTROL CONNECTOR HAVING AN I/O PROCESSOR MOUNTED AND NON-I2O DEVICE TO SAME BUS |
| 82131656     | Granted | 6385682       | 5/17/1999   | 5/7/2002   | 09/313220          | US | SYSTEM AND METHOD FOR CONTROLLING REMOTE CONSOLE FUNCTIONALITY ASSIST LOGIC                                                                                               |
| 82131716     | Granted | 6202070       | 12/31/1997  | 3/13/2001  | 09/002152          | US | COMPUTER MANUFACTURING SYSTEM ARCHITECTURE WITH ENHANCED SOFTWARE DISTRIBUTION FUNCTIONS                                                                                  |
| 82131719     | Granted | 6199167       | 3/25/1998   | 3/6/2001   | 09/047789          | US | COMPUTER ARCHITECTURE WITH PASSWORD-CHECKING BUS BRIDGE                                                                                                                   |



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| 82131953     | Granted | 6496945       | 6/4/1998    | 12/17/2002 | 09/090123          | US | COMPUTER SYSTEM IMPLEMENTING FAULT DETECTION AND ISOLATION USING UNIQUE IDENTIFICATION CODES STORED IN NON-VOLATILE MEMORY                                                                 |
| 82131956     | Granted | 6463550       | 3/12/1999   | 10/8/2002  | 09/267587          | US | COMPUTER SYSTEM IMPLEMENTING FAULT DETECTION AND ISOLATION USING UNIQUE IDENTIFICATION CODES STORED IN NON-VOLATILE MEMORY                                                                 |
| 82131962     | Granted | 6678813       | 10/28/1999  | 1/13/2004  | 09/428874          | US | DYNAMICALLY ADAPTIVE BUFFER MECHANISM                                                                                                                                                      |
| 82132016     | Granted | 6662220       | 4/30/1999   | 12/9/2003  | 09/303118          | US | METHOD AND APPARATUS FOR REMOTE COMPUTER MANAGEMENT USING WEB BROWSER AND HYPER-MEDIA MANAGED OBJECT APPLICATIONS                                                                          |
| 82132019     | Granted | 6701364       | 5/31/2000   | 3/2/2004   | 09/584602          | US | Method And Apparatus For Remote Computer Management Using Web Browser Application To Display System Hardware And Software Configuration                                                    |
| 82132094     | Granted | 6116509       | 7/14/1998   | 9/12/2000  | 09/115068          | US | COMPACT MOUNTING OF CHIP CARD READER AT FRONT OF COMPUTER DEVICE BAY AREA                                                                                                                  |
| 82132154     | Granted | 6088221       | 6/15/1998   | 7/11/2000  | 09/097324          | US | HOT-PLUGGABLE DISK DRIVE CARRIER ASSEMBLY WITH NO LOOSE PARTS                                                                                                                              |
| 82132268     | Granted | 6898740       | 1/25/2001   | 5/24/2005  | 09/769953          | US | Computer System Having Configurable Core Logic Chipset For Connection To A Fault-Tolerant Accelerated Graphics Port Bus And Peripheral Component Interconnect Bus                          |
| 82132340     | Granted | 6754755       | 11/21/2000  | 6/22/2004  | 09/717667          | US | Service Request System Using An Activity Indicator To Reduce Processing Overhead                                                                                                           |
| 82132394     | Granted | 6442144       | 6/15/1998   | 8/27/2002  | 09/098026          | US | METHOD AND APPARATUS FOR DISCOVERING NETWORK DEVICES USING INTERNET PROTOCOL AND PRODUCING A CORRESPONDING GRAPHICAL NETWORK MAP                                                           |
| 82132505     | Granted | 6154789       | 6/15/1998   | 11/28/2000 | 09/097409          | US | PERIPHERAL CONTROLLER COMPRISING FIRST MESSAGING UNIT FOR COMMUNICATION WITH FIRST OS DRIVER AND SECOND MESSAGING UNIT FOR COMMUNICATION WITH SECOND OS DRIVER FOR MASS-STORAGE PERIPHERAL |
| 82132508     | Granted | 6128686       | 6/15/1998   | 10/3/2000  | 09/097408          | US | HIDING PERIPHERAL MEMORY TRANSACTIONS ON A LOCAL BUS WITHIN A PERIPHERAL CONTROLLER FROM A HOST SYSTEM BUS                                                                                 |
| 82132511     | Granted | 6061752       | 6/15/1998   | 5/9/2000   | 09/097493          | US | TECHNIQUE FOR HOT PLUGGING A PERIPHERAL CONTROLLER CARD CONTAINING PCI AND SCSI BUSES ON A SINGLE CONNECTOR INTO A HOST SYSTEM BOARD                                                       |
| 82132520     | Granted | 6212606       | 10/13/1998  | 4/3/2001   | 09/170965          | US | COMPUTER SYSTEM AND METHOD FOR ESTABLISHING A STANDARDIZED SHARED LEVEL FOR EACH STORAGE UNIT                                                                                              |
| 82132523     | Granted | 6842833       | 6/30/1998   | 1/11/2005  | 09/107539          | US | Computer System And Method For Transferring Data Between Multiple Peer-Level Storage Units                                                                                                 |
| 82132529     | Granted | 6295578       | 4/9/1999    | 9/25/2001  | 09/288889          | US | CASCADED REMOVABLE MEDIA DATA STORAGE SYSTEM                                                                                                                                               |

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| 82132586     | Granted | 6122216       | 12/9/1998   | 9/19/2000  | 09/208306          | US | SINGLE PACKAGE DUAL MEMORY DEVICE                                                                                                                                           |
| 82132592     | Granted | 6097619       | 6/19/1998   | 8/1/2000   | 09/100919          | US | SYMMETRIC MEMORY BOARD                                                                                                                                                      |
| 82132595     | Granted | 6111753       | 6/19/1998   | 8/29/2000  | 09/100699          | US | VOLTAGE REGULATOR MODULE                                                                                                                                                    |
| 82132631     | Granted | 6212560       | 5/8/1998    | 4/3/2001   | 09/075298          | US | DYNAMIC PROXY SERVER                                                                                                                                                        |
| 82132634     | Granted | 6901596       | 5/7/1998    | 5/31/2005  | 09/074109          | US | METHOD OF COMMUNICATING ASYNCHRONOUS EVENTS TO A REMOTE PROCEDURE CALL CLIENTS                                                                                              |
| 82132643     | Granted | 6167448       | 6/11/1998   | 12/26/2000 | 09/096064          | US | MANAGEMENT EVENT NOTIFICATION SYSTEM USING EVENT NOTIFICATION MESSAGES WRITTEN USING A MARKUP LANGUAGE                                                                      |
| 82132655     | Granted | 6611865       | 4/30/1999   | 8/26/2003  | 09/303119          | US | METHOD AND APPARATUS FOR EXPORTING DIAGNOSTICS INTERFACE AND MENU SYSTEM TO ALLOW REMOTE EXECUTION                                                                          |
| 82132658     | Granted | 6434615       | 4/30/1999   | 8/13/2002  | 09/303151          | US | METHOD AND APPARATUS FOR REMOTE COMPUTER MANAGEMENT USING HTML IN A WEB BROWSER APPLICATION AND AN INTERNET SERVER EXTENSION ON AN INTERNET SERVER API-COMPLIANT WEB SERVER |
| 82132721     | Granted | 6128682       | 6/25/1998   | 10/3/2000  | 09/104837          | US | METHOD AND APPARATUS FOR BUS ISOLATION                                                                                                                                      |
| 82132772     | Granted | 6216183       | 11/20/1998  | 4/10/2001  | 09/196508          | US | APPARATUS AND METHOD FOR SECURING INFORMATION ENTERED UPON AN INPUT DEVICE COUPLED TO A UNIVERSAL SERIAL BUS                                                                |
| 82132775     | Granted | 6272580       | 3/16/1999   | 8/7/2001   | 09/268825          | US | AN APPARATUS AND METHOD FOR DYNAMICALLY ELEVATING A LOWER LEVEL BUS MASTER TO AN UPPER LEVEL BUS MASTER WITHIN A MULTI-LEVEL ARBITRATION SYSTEM                             |
| 82132778     | Granted | 6363439       | 12/7/1998   | 3/26/2002  | 09/206515          | US | SYSTEM AND METHOD FOR POINT-TO-POINT SERIAL COMMUNICATION BETWEEN A SYSTEM INTERFACE DEVICES AND A BUS INTERFACE DEVICE IN A COMPUTER SYSTEM                                |
| 82132781     | Granted | 6263395       | 1/6/1999    | 7/17/2001  | 09/227510          | US | SYSTEM AND METHOD FOR SERIAL INTERRUPT SCANNING                                                                                                                             |
| 82132886     | Granted | 6282660       | 10/1/1998   | 8/28/2001  | 09/164543          | US | EXTENDING DIAL UP NETWORKING PARADIGM TO COVER ETHERNET BASED NETWORK CONNECTIONS                                                                                           |
| 82132904     | Granted | 6272113       | 9/11/1998   | 8/7/2001   | 09/151557          | US | NETWORK CONTROLLER SYSTEM THAT USES MULTICAST HEARTBEAT PACKETS                                                                                                             |
| 82132907     | Granted | 6229538       | 9/18/2000   | 5/8/2001   | 09/151265          | US | PORT-CENTRIC GRAPHIC REPRESENTATIONS OF NETWORK CONTROLLERS                                                                                                                 |
| 82133006     | Granted | 6779027       | 4/30/1999   | 8/17/2004  | 09/303308          | US | INTELLIGENT MANAGEMENT MODULE APPLICATION PROGRAMMING INTERFACE WITH UTILITY OBJECTS                                                                                        |
| 82133129     | Granted | 6058011       | 2/12/1999   | 5/2/2000   | 09/249039          | US | COMPUTER CHASSIS WITH INTEGRATED COOLING FEATURES                                                                                                                           |

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| 82133147     | Granted | 6826715       | 10/28/1999  | 11/30/2004 | 09/429226          | US | AUTOMATIC CAPTURE AND COMPARISON OF COMPUTER CONFIGURATION DATA                                                                               |
| 82133207     | Granted | 7076629       | 12/26/2001  | 7/11/2006  | 10/037806          | US | METHOD FOR PROVIDING CONCURRENT NON-BLOCKING HEAP MEMORY MANAGEMENT FOR FIXED SIZED BLOCKS                                                    |
| 82133216     | Granted | 6862646       | 12/28/2001  | 3/1/2005   | 10/034464          | US | Method And Apparatus For Eliminating The Software Generated Ready-Signal To Hardware Devices That Are Not Part Of The Memory Coherency Domain |
| 82133258     | Granted | 6895456       | 12/12/2000  | 5/17/2005  | 09/735267          | US | System Supporting Multicast Master Cycles Between Different Buses In A Computer System                                                        |
| 82133327     | Granted | 6857040       | 12/5/2001   | 2/15/2005  | 10/006878          | US | BI-DIRECTIONAL BUS BRIDGE IN WHICH MULTIPLE DEVICES CAN ASSERT BUS CONCURRENTLY                                                               |
| 82133330     | Granted | 6435889       | 12/29/2000  | 8/20/2002  | 09/752129          | US | REDUCED COMPLEXITY HOT PLUG BLIND MATE FAN ASSEMBLY AND CONNECTOR THEREFOR                                                                    |
| 82133336     | Granted | 6664969       | 11/12/1999  | 12/16/2003 | 09/438253          | US | OPERATING SYSTEM INDEPENDENT METHOD AND APPARATUS FOR GRAPHICAL REMOTE ACCESS                                                                 |
| 82133339     | Granted | 8610734       | 7/1/2003    | 12/17/2013 | 10/611403          | US | OPERATING SYSTEM INDEPENDENT METHOD AND APPARATUS FOR GRAPHICAL REMOTE ACCESS                                                                 |
| 82133384     | Granted | 6631440       | 11/30/2000  | 10/7/2003  | 09/726739          | US | METHOD AND APPARATUS FOR SCHEDULING MEMORY CALVRATIONS BASED ON QUEUED TRANSACTIONS                                                           |
| 82133402     | Granted | 7073064       | 3/31/2000   | 7/4/2006   | 09/540697          | US | METHOD AND APPARATUS TO PROVIDE ENHANCED COMPUTER PROTECTION                                                                                  |
| 82133456     | Granted | 6624729       | 12/29/2000  | 9/23/2003  | 09/752059          | US | SLOTTED GROUND PLANE FOR CONTROLLING THE IMPEDANCE OF HIGH SPEED SIGNALS ON A PRINTED CIRCUIT BOARD                                           |
| 82133573     | Granted | 6697620       | 6/23/2000   | 2/24/2004  | 09/602004          | US | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SERVICES ACROSS NETWORKS THAT USE DIFFERENT PROTOCOLS                                       |
| 82133639     | Granted | 6704826       | 9/21/2000   | 3/9/2004   | 09/666817          | US | DIGITAL SIGNAL ISOLATION                                                                                                                      |
| 82133645     | Granted | 6796833       | 10/31/2001  | 9/28/2004  | 10/003377          | US | MULTI-SERVER, QUICK SWAP RACK FRAME WITH CONSOLIDATED POWER DISTRIBUTION, INTEGRATED KEYBOARD/VIDEO/MOUSE CONCENTRATOR, AND USB HUB           |
| 82133705     | Granted | 6976058       | 9/29/2000   | 12/13/2005 | 09/675281          | US | COMPUTER CARD FOR STORING BOOTABLE IMAGES AND PROVIDING REMOTE MANAGEMENT FUNCTIONS                                                           |
| 82133711     | Granted | 6832372       | 9/29/2000   | 12/14/2004 | 09/675529          | US | UPDATING SYSTEM ROM CONFIGURATION UTILITY USING NV-RAM                                                                                        |
| 82133768     | Granted | 6678775       | 12/29/2000  | 1/13/2004  | 09/751049          | US | SYSTEM ENABLING AUTOMATIC ERROR DETECTION IN RESPONSE TO REMOVAL OF BUS ADAPTER                                                               |

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| 82133816     | Granted | 6742072       | 8/31/2000   | 5/25/2004  | 09/6552321         | US | METHOD AND APPARATUS FOR SUPPORTING CONCURRENT SYSTEM AREA NETWORK INTER-PROCESS COMMUNICATION AND I/O        |
| 82133822     | Granted | 7388834       | 6/28/2001   | 6/17/2008  | 09/895577          | US | System And Method For Controlling Network Traffic Flow In Multi-processor Network                             |
| 82134566     | Granted | 6009269       | 3/10/1997   | 12/28/1999 | 08/815979          | US | DETECTING CONCURRENCY ERRORS IN MULTI-THREADED PROGRAMS                                                       |
| 82134629     | Granted | 5960215       | 9/12/1996   | 9/28/1999  | 08/712742          | US | TRANSMIT DATA FIFO FOR FLOW CONTROLLED DATA                                                                   |
| 82134635     | Granted | 6212567       | 9/12/1996   | 4/3/2001   | 08/712778          | US | METHOD AND APPARATUS FOR PERFORMING RAW CELL STATUS REPORT FREQUENCY MITIGATION ON RECEIVE IN A NETWORK NODE  |
| 82134638     | Granted | 6115775       | 9/12/1996   | 9/5/2000   | 08/712688          | US | METHOD AND APPARATUS FOR PERFORMING INTERRUPT FREQUENCY MITIGATION IN A NETWORK NODE                          |
| 82134647     | Granted | 6085292       | 6/5/1997    | 7/4/2000   | 08/870152          | US | APPARATUS AND METHOD FOR PROVIDING NON-BLOCKING PIPELINED CACHE                                               |
| 82134701     | Granted | 6109777       | 4/16/1997   | 8/29/2000  | 08/834412          | US | DIVISION WITH LIMITED CARRY-PROPAGATION IN QUOTIENT ACCUMULATION                                              |
| 82134776     | Granted | 6112318       | 1/4/2000    | 8/29/2000  | 08/909403          | US | PERFORMANCE COUNTERS CONTROLLED BY PROGRAMMABLE LOGIC                                                         |
| 82134833     | Granted | 5926366       | 7/21/1998   | 7/20/1999  | 08/749465          | US | TAB AND SLOT DISK DRIVE VIBRATION REDUCTION STRUCTURE                                                         |
| 82134842     | Granted | 5956665       | 11/15/1996  | 9/21/1999  | 08/749507          | US | AUTOMATIC MAPPING, MONITORING, AND CONTROL OF COMPUTER ROOM COMPONENTS                                        |
| 82134893     | Granted | 5796939       | 3/10/1997   | 8/18/1998  | 08/812899          | US | HIGH FREQUENCY SAMPLING OF PROCESSOR PERFORMANCE COUNTERS                                                     |
| 82134947     | Granted | 5915098       | 10/24/1997  | 6/22/1999  | 08/957338          | US | SYSTEM FOR COMPRESSING BIT MAPS TO BE SHARED AND DISPLAYED IN COLLABORATIVE TOOL BY CLIENT AND SERVER SYSTEMS |
| 82134950     | Granted | 6292166       | 10/24/1997  | 9/18/2001  | 08/956742          | US | SYSTEM AND METHOD FOR SHARING DIVERSE DISPLAY TYPES IN A BIT MAP SHARING COLLABORATIVE TOOL                   |
| 82134956     | Granted | 6154816       | 10/24/1997  | 11/28/2000 | 08/957565          | US | LOW OCCUPANCY PROTOCOL FOR MANAGING CONCURRENT TRANSACTIONS WITH DEPENDENCIES                                 |
| 82134965     | Granted | 6202126       | 10/24/1997  | 3/13/2001  | 08/957697          | US | VICTIMIZATION OF CLEAN DATA BLOCKS                                                                            |
| 82135010     | Granted | 6052764       | 12/19/1997  | 4/18/2000  | 08/994364          | US | COMPUTER DATA RESTORATION ASSEMBLY AND ASSOCIATED METHOD                                                      |
| 82135085     | Granted | 5958040       | 5/28/1997   | 9/28/1999  | 08/864125          | US | ADAPTIVE STREAM BUFFERS                                                                                       |
| 82135091     | Granted | 5933640       | 2/26/1997   | 8/3/1999   | 08/806591          | US | METHOD FOR ANALYZING AND PRESENTING TEST EXECUTION FLOWS OF PROGRAMS                                          |
| 82135094     | Granted | 6115814       | 11/14/1997  | 9/5/2000   | 08/971056          | US | MEMORY PAGING SCHEME FOR 8051 CLASS MICROCONTROLLERS                                                          |

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| 82135190     | Granted | 6275236       | 1/24/1997   | 8/14/2001  | 08/788519          | US | SYSTEM AND METHOD FOR DISPLAYING TRACKED OBJECTS ON A DISPLAY DEVICE                                                                                                      |
| 82135202     | Granted | 5991808       | 6/2/1997    | 11/23/1999 | 08/867095          | US | TASK PROCESSING OPTIMIZATION IN A MULTIPROCESSOR SYSTEM                                                                                                                   |
| 82135376     | Granted | 5889714       | 11/3/1997   | 3/30/1999  | 08/963047          | US | ADAPTIVE PRECHARGE MANAGEMENT FOR SYNCHRONOUS DRAM                                                                                                                        |
| 82135391     | Granted | 6012106       | 11/3/1997   | 1/4/2000   | 08/962631          | US | PREFETCH MANAGEMENT FOR DMA READ TRANSACTIONS DEPENDING UPON PAST HISTORY OF ACTUAL TRANSFER LENGTHS                                                                      |
| 82135403     | Granted | 6006168       | 12/12/1997  | 12/21/1999 | 08/990121          | US | THERMAL MODEL FOR CENTRAL PROCESSING UNIT                                                                                                                                 |
| 82135439     | Granted | 6178521       | 5/22/1998   | 1/23/2001  | 09/083818          | US | METHOD AND APPARATUS FOR DISASTER TOLERANT COMPUTER SYSTEM USING CASCADED STORAGE CONTROLLERS                                                                             |
| 82135448     | Granted | 6081909       | 11/6/1997   | 6/27/2000  | 08/965603          | US | IRREGULARLY GRAPHED ENCODING TECHNIQUE                                                                                                                                    |
| 82135451     | Granted | 6298419       | 3/26/1998   | 10/2/2001  | 09/048231          | US | PROTOCOL FOR SOFTWARE DISTRIBUTED SHARED MEMORY WITH MEMORY SCALING                                                                                                       |
| 82135457     | Granted | 6115550       | 6/11/1997   | 9/5/2000   | 08/873146          | US | LOADER CONDITIONALLY REPLACING A CODE SEQUENCE WITH A FUNCTIONALLY-ALIKE CODE SEQUENCE IN AN EXECUTABLE PROGRAM INTENDED FOR EXECUTION IN DIFFERENT RUN-TIME ENVIRONMENTS |
| 82135466     | Granted | 6069897       | 7/9/1997    | 5/30/2000  | 08/890167          | US | INTERFACE WITH DUAL MODE OF OPERATION                                                                                                                                     |
| 82135505     | Granted | 6622247       | 12/19/1997  | 9/16/2003  | 08/993799          | US | METHOD FOR CERTIFYING THE AUTHENTICITY OF DIGITAL OBJECTS BY AN AUTHENTICATION AUTHORITY AND FOR CERTIFYING THEIR COMPLIANCE BY A TESTING AUTHORITY                       |
| 82135508     | Granted | 6230246       | 1/30/1998   | 5/8/2001   | 09/016320          | US | NON-INTRUSIVE CRASH CONSISTENT COPYING IN DISTRIBUTED STORAGE SYSTEMS WITHOUT CLIENT COOPERATION                                                                          |
| 82135631     | Granted | 6085296       | 11/12/1997  | 7/4/2000   | 08/968238          | US | SHARING MEMORY AMONG COMPUTER PROCESSES                                                                                                                                   |
| 82135646     | Granted | 6067604       | 8/11/1997   | 5/23/2000  | 08/909405          | US | SPACE-TIME MEMORY                                                                                                                                                         |
| 82135715     | Granted | 6076060       | 5/1/1998    | 6/13/2000  | 09/071441          | US | COMPUTER METHOD AND APPARATUS FOR TRANSLATING TEXT TO SOUND                                                                                                               |
| 82135883     | Granted | 6199153       | 6/18/1998   | 3/6/2001   | 09/099383          | US | METHOD AND APPARATUS FOR MINIMIZING PINCOUNT NEEDED BY EXTERNAL MEMORY CONTROL CHIP FOR MULTIPROCESSORS WITH LIMITED MEMORY SIZE REQUIREMENTS                             |
| 82135898     | Granted | 6253285       | 7/15/1998   | 6/26/2001  | 09/116039          | US | METHOD AND APPARATUS FOR MINIMIZING DCACHE INDEX MATCH ALIASING USING HASHING IN SYNCONVM/SUBSET PROCESSING                                                               |

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| 82135949     | Granted | 6101420       | 10/24/1997  | 8/8/2000   | 08/957543          | US | METHOD AND APPARATUS FOR DISAMBIGUATING CHANGE-TO-DIRTY COMMANDS IN A SWITCH BASED MULTI-PROCESSING SYSTEM WITH COARSE DIRECTORIES                                                                              |
| 82135961     | Granted | 6112267       | 5/28/1998   | 8/29/2000  | 09/086134          | US | HIERARCHICAL RING BUFFERS FOR BUFFERING DATA BETWEEN PROCESSOR AND I/O DEVICE PERMITTING DATA WRITES BY PROCESSOR AND DATA READS BY I/O DEVICE SIMULTANEOUSLY DIRECTED AT DIFFERENT BUFFERS AT DIFFERENT LEVELS |
| 82136006     | Granted | 6122728       | 2/2/1998    | 9/19/2000  | 09/017297          | US | TECHNIQUE FOR ORDERING INTERNAL PROCESSOR REGISTER ACCESSES                                                                                                                                                     |
| 82136018     | Granted | 6141734       | 2/3/1998    | 10/31/2000 | 09/017752          | US | METHOD AND APPARATUS FOR OPTIMIZING THE PERFORMANCE OF LDL AND STXC INTERLOCK INSTRUCTIONS IN THE CONTEXT OF A WRITE INVALIDATE PROTOCOL                                                                        |
| 82136021     | Granted | 6253301       | 11/28/2000  | 6/26/2001  | 09/061626          | US | METHOD AND APPARATUS FOR A DEDICATED PHYSICALLY INDEXED COPY OF THE DATA CACHE TAG ARRAYS                                                                                                                       |
| 82136024     | Granted | 6154589       | 5/21/1998   | 11/28/2000 | 09/082767          | US | METHOD AND SYSTEM FOR REMOVAL OF LOW ORDER OPTICAL TRANSMISSION MODES IN MULTIMODE OPTICAL FIBER COMPUTER NETWORK TO IMPROVE MODAL BANDWIDTH                                                                    |
| 82136030     | Granted | 6185651       | 11/5/1997   | 2/6/2001   | 08/965073          | US | SCSI BUS EXTENDER UTILIZING TAGGED QUEUING IN A MULTI-INITIATOR ENVIRONMENT                                                                                                                                     |
| 82136066     | Granted | 6167490       | 9/12/1997   | 12/26/2000 | 08/928278          | US | USING GLOBAL MEMORY INFORMATION TO MANAGE MEMORY IN A COMPUTER NETWORK                                                                                                                                          |
| 82136069     | Granted | 6633916       | 6/10/1998   | 10/14/2003 | 09/095368          | US | METHOD AND APPARATUS FOR VIRTUAL RESOURCE HANDLING IN A MULTI-PROCESSOR COMPUTER SYSTEM                                                                                                                         |
| 82136153     | Granted | 6178469       | 6/30/1998   | 1/23/2001  | 09/107599          | US | ENABLING ACCESS TO A SELECTED ONE OF TWO DETECTED SAME TYPE PERIPHERAL DEVICES CONNECTED TO SEPARATE PERIPHERAL SLOTS IN A COMPUTER                                                                             |
| 82136258     | Granted | 6119075       | 11/26/1997  | 9/12/2000  | 08/980164          | US | METHOD FOR ESTIMATING STATISTICS OF PROPERTIES OF INTERACTIONS PROCESSED BY A PROCESSOR PIPELINE                                                                                                                |
| 82136276     | Granted | 6092180       | 11/26/1997  | 7/18/2000  | 08/980035          | US | METHOD FOR MEASURING LATENCIES BY RANDOMLY SELECTED SAMPLING OF THE INSTRUCTIONS WHILE THE INSTRUCTION ARE EXECUTED                                                                                             |
| 82136444     | Granted | 6073250       | 11/6/1997   | 6/6/2000   | 08/965606          | US | LOSS RESILIENT DECODING TECHNIQUE                                                                                                                                                                               |
| 82136465     | Granted | 6253289       | 5/29/1998   | 6/26/2001  | 09/087034          | US | MAXIMIZING SEQUENTIAL READ STREAMS WHILE MINIMIZING THE IMPACT ON CACHE AND OTHER APPLICATIONS                                                                                                                  |

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| 82136468     | Granted | 6633957       | 5/1/2001    | 10/14/2003 | 09/846650          | US | MAXIMIZING SEQUENTIAL READ STREAMS WHILE MINIMIZING THE IMPACT ON CACHE AND OTHER APPLICATIONS                                                |
| 82136522     | Granted | 6163864       | 6/10/1998   | 12/19/2000 | 09/095149          | US | METHOD FOR COST-EFFECTIVE PRODUCTION TESTING OF INPUT VOLTAGE LEVELS OF THE FORWARDED CLOCK INTERFACE OF HIGH PERFORMANCE INTEGRATED CIRCUITS |
| 82136630     | Granted | 6158049       | 8/11/1998   | 12/5/2000  | 09/132449          | US | USER TRANSPARENT MECHANISM FOR PROFILE FEEDBACK OPTIMIZATION                                                                                  |
| 82136699     | Granted | 6192394       | 7/14/1998   | 2/20/2001  | 09/114373          | US | INTER-PROGRAM SYNCHRONOUS COMMUNICATIONS USING A COLLABORATION SOFTWARE SYSTEM                                                                |
| 82136708     | Granted | 6339532       | 6/8/2000    | 1/15/2002  | 09/590535          | US | DEVICE AND METHOD FOR DAMPING A DIGITAL MEDIA DRIVE                                                                                           |
| 82136714     | Granted | 6243744       | 5/26/1998   | 6/5/2001   | 09/085748          | US | COMPUTER NETWORK CLUSTER GENERATION INDICATOR                                                                                                 |
| 82136828     | Granted | 6449713       | 10/18/1998  | 9/10/2002  | 09/195121          | US | IMPLEMENTATION OF A CONDITIONAL MOVE INSTRUCTION IN AN OUT-OF-ORDER PROCESSOR                                                                 |
| 82136876     | Granted | 6647419       | 9/22/1999   | 11/11/2003 | 09/401617          | US | SYSTEM AND METHOD FOR ALLOCATING SERVER OUTPUT BANDWIDTH                                                                                      |
| 82136879     | Granted | 6560243       | 4/30/1999   | 5/6/2003   | 09/302781          | US | SYSTEM AND METHOD FOR RECEIVER BASED ALLOCATION OF NETWORK BANDWIDTH                                                                          |
| 82136939     | Granted | 6647468       | 2/26/1999   | 11/11/2003 | 09/258477          | US | METHOD AND SYSTEM FOR OPTIMIZING TRANSLATION BUFFER RECOVERY AFTER A MISS OPERATION WITHIN A MULTI-PROCESSOR ENVIRONMENT                      |
| 82136942     | Granted | 6865651       | 10/21/2003  | 3/8/2005   | 10/689883          | US | METHOD AND SYSTEM FOR OPTIMIZING TRANSLATION BUFFER RECOVERY AFTER A MISS OPERATION WITHIN A MULTI-PROCESSOR ENVIRONMENT                      |
| 82136948     | Granted | 6356979       | 5/17/1999   | 3/12/2002  | 09/312944          | US | SYSTEM AND METHOD FOR SELECTIVELY PRESENTING LOGICAL STORAGE UNITS TO MULTIPLE HOST OPERATING SYSTEMS IN A NETWORKED COMPUTING SYSTEM         |
| 82136954     | Granted | 7000069       | 4/5/1999    | 2/14/2006  | 09/286160          | US | APPARATUS AND METHOD FOR PROVIDING VERY LARGE VIRTUAL STORAGE VOLUMES USING REDUNDANT ARRAYS OF DISKS                                         |
| 82136957     | Granted | 7356644       | 12/22/2005  | 4/8/2008   | 11/315606          | US | Apparatus And Method For Providing Very Large Virtual Storage Volumes Using Redundant Arrays Of Disks                                         |
| 82136999     | Granted | 6732135       | 1/31/2000   | 5/4/2004   | 09/494593          | US | METHOD AND APPARATUS FOR ACCUMULATING PARTIAL QUOTIENTS IN A DIGITAL PROCESSOR                                                                |
| 82137005     | Granted | 6757330       | 6/1/2000    | 6/29/2004  | 09/584873          | US | Efficient Implementation Of Half-Pixel Motion Prediction                                                                                      |
| 82137008     | Granted | 6201418       | 8/13/1998   | 3/13/2001  | 09/132797          | US | DIFFERENTIAL SENSE AMPLIFIER WITH REDUCED HOLD TIME                                                                                           |

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| 82137011     | Granted | 6671273       | 12/31/1998  | 12/30/2003 | 09/224189          | US | METHOD FOR USING OUTGOING TCP/IP SEQUENCE NUMBER FIELDS TO PROVIDE A DESIRED CLUSTER NODE                                                                             |
| 82137140     | Granted | 6144228       | 6/28/1999   | 11/7/2000  | 09/340774          | US | GENERALIZED PUSH-PULL CASCODE LOGIC TECHNIQUE                                                                                                                         |
| 82137146     | Granted | 6714196       | 8/20/2001   | 3/30/2004  | 09/934236          | US | METHOD AND APPARATUS FOR TILED POLYGON TRAVERSAL                                                                                                                      |
| 82137383     | Granted | 6721275       | 2/1/2000    | 4/13/2004  | 09/494858          | US | BRIDGED NETWORK STATIONS LOCATION REVISION                                                                                                                            |
| 82155134     | Granted | 6076158       | 7/1/1993    | 6/13/2000  | 08/086354          | US | BRANCH PREDICTION IN HIGH-PERFORMANCE PROCESSORS                                                                                                                      |
| 82155743     | Granted | 6167509       | 5/16/1994   | 12/26/2000 | 08/243559          | US | BRANCH PERFORMANCE IN HIGH SPEED PROCESSOR                                                                                                                            |
| 82156067     | Granted | 5836014       | 5/16/1994   | 11/10/1998 | 08/243560          | US | METHOD OF CONSTRUCTING A CONSTANT-FOLDING MECHANISM IN A MULTILANGUAGE OPTIMIZING COMPILER                                                                            |
| 82160441     | Granted | 5819109       | 12/7/1992   | 10/6/1998  | 07/987116          | US | SYSTEM FOR STORING PENDING PARITY UPDATE LOG ENTRIES, CALCULATING NEW PARITY, UPDATING THE PARITY BLOCK, AND REMOVING EACH ENTRY FROM THE LOG WHEN UPDATE IS COMPLETE |
| 82162124     | Granted | 5829051       | 4/4/1994    | 10/27/1998 | 08/223069          | US | APPARATUS AND METHOD FOR INTELLIGENT MULTIPLE-PROBE CACHE ALLOCATION                                                                                                  |
| 82162670     | Granted | 6249818       | 10/21/2000  | 6/19/2001  | 08/085505          | US | NETWORK TRANSPORT DRIVER INTERFACING                                                                                                                                  |
| 82162868     | Granted | 5793658       | 1/17/1996   | 8/11/1998  | 08/591204          | US | METHOD AND APPARATUS FOR VIDEO COMPRESSION AND DECOMPRESSION USING HIGH SPEED DISCRETE COSINE TRANSFORM                                                               |
| 82163105     | Granted | 6704861       | 11/19/1996  | 3/9/2004   | 08/752729          | US | MECHANISM FOR EXECUTING COMPUTER INSTRUCTIONS IN PARALLEL                                                                                                             |
| 82163474     | Granted | 6256694       | 6/30/1994   | 7/3/2001   | 08/269251          | US | DISTRIBUTED EARLY ARBITRATION                                                                                                                                         |
| 82163735     | Granted | 5881313       | 11/7/1994   | 3/9/1999   | 08/335538          | US | ARBITRATION SYSTEM BASED ON REQUESTER CLASS AND RELATIVE PRIORITY INCLUDING TRANSMIT DESCRIPTOR VALID BIT FOR A SHARED RESOURCE HAVING MULTIPLE REQUESTERS            |
| 82163921     | Granted | 5778175       | 12/22/1995  | 7/7/1998   | 08/577575          | US | METHOD IMPLEMENTED BY A COMPUTER NETWORK ADAPTER FOR AUTONOMOUSLY ADJUSTING A TRANSMIT COMMENCEMENT THRESHOLD VALUE UPON OCCURRENCE OF AN UNDERFLOW CONDITION         |
| 82164044     | Granted | 6295585       | 6/7/1995    | 9/25/2001  | 08/482925          | US | HIGH-PERFORMANCE COMMUNICATION METHOD AND APPARATUS FOR WRITE-ONLY NETWORKS                                                                                           |
| 82164116     | Granted | 6311287       | 10/11/1994  | 10/30/2001 | 08/321334          | US | VARIABLE FREQUENCY CLOCK CONTROL FOR MICROPROCESSOR-BASED COMPUTER SYSTEMS                                                                                            |

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| 82164179     | Granted | 5696956       | 11/8/1995   | 12/9/1997  | 08/554643          | US | DYNAMICALLY PROGRAMMABLE REDUCED INSTRUCTION SET COMPUTER WITH PROGRAMMABLE PROCESSOR LOADING BASED ON PROGRAM NUMBER FIELD AND PROGRAM NUMBER REGISTER CONTENTS |
| 82164182     | Granted | 5819064       | 11/8/1995   | 10/6/1998  | 08/555058          | US | HARDWARE EXTRACTION TECHNIQUE FOR PROGRAMMABLE REDUCED INSTRUCTION SET COMPUTERS                                                                                 |
| 82164296     | Granted | 5801957       | 11/1/1995   | 9/1/1998   | 08/551504          | US | IMPLICIT TREE-MAPPING TECHNIQUE                                                                                                                                  |
| 82164539     | Granted | 5790775       | 10/23/1995  | 8/4/1998   | 08/546804          | US | HOST TRANSPARENT STORAGE CONTROLLER<br>FAILOVER/FAILBACK OF SCSI TARGETS AND ASSOCIATED UNITS                                                                    |
| 82164608     | Granted | 6078565       | 6/20/1997   | 6/20/2000  | 08/879359          | US | METHOD AND APPARATUS TO EXPAND AN ON CHIP FIFO INTO LOCAL MEMORY                                                                                                 |
| 82164671     | Granted | 5698818       | 4/8/1996    | 12/16/1997 | 08/629292          | US | TWO PART CLOSELY COUPLED CROSS POLARIZED EMI SHIELD                                                                                                              |
| 82164788     | Granted | 5778165       | 10/20/1995  | 7/7/1998   | 08/546006          | US | VARIABLE-LEVEL BACKUP SCHEDULING METHOD AND APPARATUS                                                                                                            |
| 82164848     | Granted | 5788869       | 11/2/1995   | 8/4/1998   | 08/552322          | US | METHODOLOGY FOR IN SITU ETCH STOP DETECTION AND CONTROL OF PLASMA ETCHING PROCESS AND DEVICE DESIGN TO MINIMIZE PROCESS CHAMBER CONTAMINATION                    |
| 82164863     | Granted | 5671406       | 10/18/1995  | 9/23/1997  | 08/544949          | US | DATA STRUCTURE ENHANCEMENTS FOR IN-PLACE SORTING OF A SINGLY LINKED LIST                                                                                         |
| 82164866     | Granted | 5761501       | 10/2/1995   | 6/2/1998   | 08/537375          | US | STACKED SKIP LIST DATA STRUCTURES                                                                                                                                |
| 82164914     | Granted | 5974506       | 6/28/1996   | 10/26/1999 | 08/671153          | US | ENABLING MIRROR, NONMIRROR AND PARTIAL MIRROR CACHE MODES IN A DUAL CACHE SYSTEM                                                                                 |
| 82164917     | Granted | 6279078       | 6/28/1996   | 8/21/2001  | 08/668512          | US | APPARATUS AND METHOD FOR SYNCHRONIZING A CACHE MODE IN A DUAL CONTROLLER, DUAL CACHE MEMORY SYSTEM OPERATING IN A PLURALITY OF CACHE MODES                       |
| 82164920     | Granted | 5754783       | 2/1/1996    | 5/19/1998  | 08/595085          | US | APPARATUS AND METHOD FOR INTERLEAVING TIMED PROGRAM DATA WITH SECONDARY DATA                                                                                     |
| 82164974     | Granted | 5926640       | 11/1/1996   | 7/20/1999  | 08/743377          | US | SKIPPING CLOCK INTERRUPTS DURING SYSTEM INACTIVITY TO REDUCE POWER CONSUMPTION                                                                                   |
| 82164977     | Granted | 6161187       | 1/14/1999   | 12/12/2000 | 09/232009          | US | SKIPPING CLOCK INTERRUPTS DURING SYSTEM INACTIVITY TO REDUCE POWER CONSUMPTION                                                                                   |
| 82165031     | Granted | 5612897       | 3/21/1996   | 3/18/1997  | 08/620110          | US | SYMMETRICALLY SWITCHED MULTIMEDIA SYSTEM                                                                                                                         |
| 82165040     | Granted | 5758359       | 10/24/1996  | 5/26/1998  | 08/736450          | US | METHOD AND APPARATUS FOR PERFORMING RETROACTIVE BACKUPS IN A COMPUTER SYSTEM                                                                                     |
| 82165106     | Granted | 6078740       | 2/22/1999   | 6/20/2000  | 08/740737          | US | ITEM SELECTION BY PREDICTION AND REFINEMENT                                                                                                                      |

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| 82165112     | Granted | 6192460       | 12/16/1997  | 2/20/2001  | 08/991828          | US | METHOD AND APPARATUS FOR ACCESSING DATA IN A SHADOW SET AFTER A FAILED DATA OPERATION                                                         |
| 82165118     | Granted | 5819252       | 4/10/1996   | 10/6/1998  | 08/630795          | US | METHOD AND APPARATUS FOR HANDLING AND DETECTING AN INVALID USE OF A DATA STRUCTURE                                                            |
| 82165121     | Granted | 5847575       | 6/21/1996   | 12/8/1998  | 08/668170          | US | METHOD AND APPARATUS FOR PERFORMING SWITCHING SUPPLY DRIVE IN CMOS PAD DRIVERS                                                                |
| 82165175     | Granted | 5781550       | 2/2/1996    | 7/14/1998  | 08/594632          | US | TRANSPARENT AND SECURE NETWORK GATEWAY                                                                                                        |
| 82165220     | Granted | 6775289       | 8/1/2000    | 8/10/2004  | 09/630632          | US | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                                                |
| 82165283     | Granted | 5825680       | 6/21/1996   | 10/20/1998 | 08/669266          | US | METHOD AND APPARATUS FOR PERFORMING FAST DIVISION                                                                                             |
| 82165289     | Granted | 5781531       | 12/27/1995  | 7/14/1998  | 08/578932          | US | METHOD AND APPARATUS FOR HIERARCHICAL RELATIVE ERROR SCHEDULING                                                                               |
| 82165349     | Granted | 5821575       | 3/26/1998   | 10/13/1998 | 08/650561          | US | COMPACT SELF-ALIGNED BODY CONTACT SILICON-ON-INSULATOR TRANSISTOR                                                                             |
| 82165358     | Granted | 6678951       | 12/12/2000  | 1/20/2004  | 09/735566          | US | A METHOD OF FORMING ELECTRICAL INTERCONNECTS HAVING ELECTROMIGRATION-INHIBITING PLUGS                                                         |
| 82165370     | Granted | 6292589       | 6/21/1996   | 9/18/2001  | 08/668153          | US | METHOD FOR CHOOSING RATE CONTROL PARAMETERS IN MOTION-COMPENSATED TRANSFORM-BASED PICTURE CODING SCHEME USING NON-PARAMETRIC TECHNIQUE        |
| 82165406     | Granted | 6502237       | 2/11/2000   | 12/31/2002 | 09/503232          | US | METHOD AND APPARATUS FOR PERFORMING BINARY TRANSLATION METHOD AND APPARATUS FOR PERFORMING BINARY TRANSLATION                                 |
| 82165418     | Granted | 6226789       | 1/29/1996   | 5/1/2001   | 08/593638          | US | METHOD AND APPARATUS FOR DATA FLOW ANALYSIS                                                                                                   |
| 82165430     | Granted | 5802373       | 1/29/1996   | 9/1/1998   | 08/592982          | US | METHOD FOR PROVIDING A PIPELINE INTERPRETER FOR A VARIABLE LENGTH INSTRUCTION SET                                                             |
| 82165433     | Granted | 5978892       | 5/3/1996    | 11/2/1999  | 08/642706          | US | VIRTUAL MEMORY ALLOCATION IN A VIRTUAL ADDRESS SPACE HAVING AN INACCESSIBLE GAP                                                               |
| 82165436     | Granted | 6125430       | 10/30/1998  | 9/26/2000  | 09/183677          | US | VIRTUAL MEMORY ALLOCATION IN A VIRTUAL ADDRESS SPACE HAVING AN INACCESSIBLE GAP                                                               |
| 82165472     | Granted | 6128467       | 3/21/1996   | 10/3/2000  | 08/619377          | US | CROSSPOINT SWITCHED MULTIMEDIA SYSTEM                                                                                                         |
| 82165532     | Granted | 7043516       | 3/13/1998   | 5/9/2006   | 09/042417          | US | Reduction Of Add-Pipe Logic By Operand Offset Shift                                                                                           |
| 82165601     | Granted | 5764766       | 6/11/1996   | 6/9/1998   | 08/661425          | US | SYSTEM AND METHOD FOR GENERATION OF ONE-TIME ENCRYPTION KEYS FOR DATA COMMUNICATIONS AND A COMPUTER PROGRAM PRODUCT FOR IMPLEMENTING THE SAME |
| 82165613     | Granted | 6108737       | 10/24/1997  | 8/22/2000  | 08/957097          | US | METHOD AND APPARATUS FOR REDUCING LATENCY OF INTERREFERENCE ORDERING IN A MULTIPROCESSOR SYSTEM                                               |

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|--------------|---------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82165619     | Granted | 6085263       | 10/24/1997  | 7/4/2000   | 08/956861          | US | METHOD AND APPARATUS FOR EMPLOYING COMMIT-SIGNALS AND PREFETCHING TO MAINTAIN INTER-REFERENCE ORDERING IN A HIGH-PERFORMANCE I/O PROCESSOR                                         |
| 82165622     | Granted | 6061765       | 10/24/1997  | 5/9/2000   | 08/957505          | US | INDEPENDENT VICTIM DATA BUFFER AND PROBE BUFFER RELEASE CONTROL UTILIZING CONTROL FLAG                                                                                             |
| 82165793     | Granted | 5826015       | 2/20/1997   | 10/20/1998 | 08/804096          | US | METHOD AND APPARATUS FOR SECURE REMOTE PROGRAMMING OF FIRMWARE AND CONFIGURATIONS OF A COMPUTER OVER A NETWORK                                                                     |
| 82165796     | Granted | 5912621       | 7/14/1997   | 6/15/1999  | 08/892138          | US | CABINET SECURITY STATE DETECTION                                                                                                                                                   |
| 82165856     | Granted | 6061774       | 5/23/1997   | 5/9/2000   | 08/863084          | US | LIMITED VIRTUAL ADDRESS ALIASING AND FAST CONTEXT SWITCHING WITH MULTI-SET VIRTUAL CACHE WITHOUT BACKMAPS                                                                          |
| 82165916     | Granted | 5802585       | 7/17/1996   | 9/1/1998   | 08/682341          | US | BATCHED CHECKING OF SHARED MEMORY ACCESSES                                                                                                                                         |
| 82165919     | Granted | 5761729       | 7/17/1996   | 6/2/1998   | 08/672221          | US | VALIDATION CHECKING OF SHARED MEMORY ACCESSES                                                                                                                                      |
| 82165922     | Granted | 5787480       | 7/17/1996   | 7/28/1998  | 08/684281          | US | LOCK-UP FREE DATA SHARING                                                                                                                                                          |
| 82165925     | Granted | 5758183       | 7/17/1996   | 5/26/1998  | 08/682203          | US | METHOD OF REDUCING THE NUMBER OF OVERHEAD INSTRUCTIONS BY MODIFYING THE PROGRAM TO LOCATE INSTRUCTIONS THAT ACCESS SHARED DATA STORED AT TARGET ADDRESSES BEFORE PROGRAM EXECUTION |
| 82165997     | Granted | 6463548       | 5/10/1999   | 10/8/2002  | 09/309070          | US | METHOD AND APPARATUS TO ENFORCE CLOCKED CIRCUIT FUNCTIONALITY AT REDUCED FREQUENCY WITHOUT LIMITING PEAK PERFORMANCE                                                               |
| 82166030     | Granted | 6701387       | 8/31/2000   | 3/2/2004   | 09/652644          | US | ADAPTIVE DATA FETCH PREDICTION ALGORITHM                                                                                                                                           |
| 82166033     | Granted | 6233668       | 10/27/1999  | 5/15/2001  | 09/428014          | US | CONCURRENT PAGE TABLES                                                                                                                                                             |
| 82166054     | Granted | 7315884       | 4/3/2001    | 1/1/2008   | 09/825661          | US | REDUCTION OF NETWORK RETRIEVAL LATENCY USING CACHE AND DIGEST                                                                                                                      |
| 82166285     | Granted | 6609208       | 7/7/2000    | 8/19/2003  | 09/611808          | US | ENERGY-BASED SAMPLING FOR PERFORMANCE MONITORING                                                                                                                                   |
| 82166300     | Granted | 7120902       | 12/4/2001   | 10/10/2006 | 10/005923          | US | Method And Apparatus For Automatically Inferring Annotations                                                                                                                       |
| 82166360     | Granted | 7404070       | 11/28/2000  | 7/22/2008  | 09/723687          | US | Branch Prediction Combining Static And Dynamic Prediction Techniques                                                                                                               |
| 82166363     | Granted | 6618794       | 10/31/2000  | 9/9/2003   | 09/702575          | US | SYSTEM FOR GENERATING A POINT-IN-TIME COPY OF DATA IN A DATA STORAGE SYSTEM                                                                                                        |
| 82166366     | Granted | 8122114       | 10/6/2000   | 2/21/2012  | 09/68472           | US | Modular, Dynamically Extensible, And Integrated Storage Area Network Management System                                                                                             |
| 82167716     | Granted | 7286969       | 7/18/2003   | 10/23/2007 | 10/623444          | US | Method For Determining Placement Of Components In Rack                                                                                                                             |
| 82167728     | Granted | 7289335       | 7/8/2003    | 10/30/2007 | 10/615011          | US | Force Distributing Spring Element                                                                                                                                                  |

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| 82167731     | Granted | 7539027       | 10/29/2007  | 5/26/2009  | 11/926761 US       |    | Force Distributing Spring Element                                                                                           |
| 82167737     | Granted | 7493534       | 8/29/2003   | 2/17/2009  | 10/652098 US       |    | Memory Error Ranking                                                                                                        |
| 82167740     | Granted | 7346755       | 9/16/2003   | 3/18/2008  | 10/663128 US       |    | Memory Quality Assurance                                                                                                    |
| 82167743     | Granted | 7372147       | 7/2/2003    | 5/13/2008  | 10/612663 US       |    | Supporting A Circuit Package Including A Substrate Having A Solder Column Array                                             |
| 82167779     | Granted | 7707443       | 7/18/2003   | 4/27/2010  | 10/623417 US       |    | Rack-level Power Management Of Computer Systems                                                                             |
| 82167788     | Granted | 8176250       | 8/29/2003   | 5/8/2012   | 10/6552536 US      |    | System And Method For Testing A Memory                                                                                      |
| 82167797     | Granted | 7350109       | 11/14/2003  | 3/25/2008  | 10/714302 US       |    | System And Method For Testing A Memory Using DMA                                                                            |
| 82167806     | Granted | 7797134       | 11/14/2003  | 9/14/2010  | 10/714386 US       |    | System And Method For Testing A Memory With An Expansion Card Using DMA                                                     |
| 82167908     | Granted | 7035096       | 10/31/2003  | 4/25/2006  | 10/698605 US       |    | Locking Mechanism For Removable Components                                                                                  |
| 82168112     | Granted | 7647327       | 9/24/2003   | 1/12/2010  | 10/669822 US       |    | Method And System For Implementing Storage Strategies Of A File Autonomously Of A User                                      |
| 82168118     | Granted | 7333293       | 6/29/2004   | 2/19/2008  | 10/880312 US       |    | Storage System Having A Reader With A Light Sensing Portion Inclined With Respect To An Axis Of A Label Of A Storage Medium |
| 82168154     | Granted | 7210061       | 4/17/2003   | 4/24/2007  | 10/418409 US       |    | Data Redundancy For Writes Using Remote Storage System Cache Memory                                                         |
| 82168157     | Granted | 6937425       | 6/18/2003   | 8/30/2005  | 10/464102 US       |    | Head-track Alignment                                                                                                        |
| 82168169     | Granted | 7200604       | 2/17/2004   | 4/3/2007   | 10/780235 US       |    | Data De-duplication                                                                                                         |
| 82168292     | Granted | 7028106       | 12/5/2003   | 4/11/2006  | 10/728480 US       |    | Remapping Routing Information Entries In An Expander Server Card Power Switch                                               |
| 82168301     | Granted | 7685443       | 10/14/2003  | 3/23/2010  | 10/684768 US       |    | Off-line Pin Verification Using Identity-based Signatures                                                                   |
| 82168469     | Granted | 7083089       | 1/20/2004   | 8/1/2006   | 10/761752 US       |    | Method And System Of Determining Attributes Of A Functional Unit In A Multiple Processor Computer System                    |
| 82168484     | Granted | 7444636       | 7/15/2003   | 10/28/2008 | 10/619853 US       |    | Non-blocking Distinct Grouping Of Database Entries With Overflow                                                            |
| 82168490     | Granted | 7392359       | 10/1/2003   | 6/24/2008  | 10/677398 US       |    | Instruction Cache Using Single-ported Memories                                                                              |
| 82168619     | Granted | 7181575       | 9/29/2004   | 2/20/2007  | 10/953669 US       |    | PIEZO-ELECTRIC MOTOR FOR MOVING A CARRIAGE ALONG A GUIDE                                                                    |
| 82168907     | Granted | 7289300       | 1/26/2004   | 10/30/2007 | 10/764842 US       |    | Multiple Protocol Database                                                                                                  |
| 82168913     | Granted | 7127235       | 4/30/2003   | 10/24/2006 | 10/426392 US       |    | Database For Use In Telephone Communications                                                                                |
| 82168928     | Granted | 7142647       | 9/3/2003    | 11/28/2006 | 10/655242 US       |    | Database For Use In Telephone Communications                                                                                |
| 82168931     | Granted | 7483521       | 10/23/2006  | 1/27/2009  | 11/584835 US       |    | DATA REDUNDANCY SYSTEM AND METHOD                                                                                           |
| 82168964     | Granted | 7152182       | 6/6/2003    | 12/19/2006 | 10/456053 US       |    | Batched, Asynchronous Data Redundancy Technique                                                                             |
| 82168973     | Granted | 7287137       | 6/6/2003    | 10/23/2007 | 10/456363 US       |    | Techniques For Resolving Network Connectivity                                                                               |
| 82168988     | Granted | 8352637       | 9/23/2003   | 1/8/2013   | 10/667313 US       |    | CACHE MEMORY SYSTEM AND METHOD CAPABLE OF ADAPTIVELY ACCOMMODATING VARIOUS MEMORY LINE SIZES                                |
| 82168994     | Granted | 7543113       | 7/2/2004    | 6/2/2009   | 10/883860 US       |    |                                                                                                                             |

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| 82169030     | Granted   | 8464353       | 10/3/2003   | 6/11/2013  | 10/679092          | US | Method And System For Content Downloads Via An Insecure Communications Channel To Devices                                                                    |
| 82169099     | Granted   | 8626944       | 5/5/2003    | 1/7/2014   | 10/429797          | US | System And Method For Efficient Replication Of Files Employing Multiple Description Coding                                                                   |
| 82169153     | Granted   | 7567522       | 4/23/2004   | 7/28/2009  | 10/831258          | US | Suppression Of Router Advertisement                                                                                                                          |
| 82169156     | Published | 6/14/2004     | 6/14/2004   |            | 10/868093          | US | Rate Limiting Of Events                                                                                                                                      |
| 82169159     | Granted   | 7358446       | 10/14/2003  | 4/15/2008  | 10/685175          | US | Power Distribution System                                                                                                                                    |
| 82169162     | Granted   | 6954631       | 2/13/2003   | 10/11/2005 | 10/366072          | US | Apparatus And Method For Telecommunications Services                                                                                                         |
| 82169174     | Granted   | 6989523       | 4/11/2003   | 1/24/2006  | 10/412019          | US | Photon Number Resolving Systems And Methods                                                                                                                  |
| 82169216     | Granted   | 7796515       | 4/28/2004   | 9/14/2010  | 10/833057          | US | Propagation Of Viruses Through An Information Technology Network                                                                                             |
| 82169222     | Granted   | 8505096       | 7/29/2005   | 8/6/2013   | 11/192469          | US | Method Of, And Apparatus For, Monitoring Traffic Emanating From A Source In A Network                                                                        |
| 82169234     | Granted   | 7793287       | 10/1/2003   | 9/7/2010   | 10/676922          | US | Runtime Virtualization And Devirtualization Of I/O Devices By A Virtual Machine Monitor                                                                      |
| 82169483     | Granted   | 7370200       | 1/30/2004   | 5/6/2008   | 10/769190          | US | Validation For Secure Device Associations                                                                                                                    |
| 82169546     | Granted   | 7712133       | 6/20/2003   | 5/4/2010   | 10/600113          | US | INTEGRATED INTRUSION DETECTION SYSTEM AND METHOD                                                                                                             |
| 82169609     | Granted   | 7512800       | 2/3/2004    | 3/31/2009  | 10/772065          | US | Key Management Technique For Establishing A Secure Channel                                                                                                   |
| 82169849     | Granted   | 7447943       | 5/28/2003   | 11/4/2008  | 10/447118          | US | Handling Memory Errors In Response To Adding New Memory To A System                                                                                          |
| 82169855     | Granted   | 6996648       | 5/28/2003   | 2/7/2006   | 10/447117          | US | GENERATING NOTIFICATION THAT A NEW MEMORY MODULE HAS BEEN ADDED TO A SECOND MEMORY SLOT IN RESPONSE TO REPLACEMENT OF A MEMORY MODULE IN A FIRST MEMORY SLOT |
| 82169858     | Granted   | 7644182       | 3/11/2004   | 1/5/2010   | 10/797200          | US | Reconfiguring A Multicast Tree                                                                                                                               |
| 82170158     | Granted   | 7268970       | 11/20/2003  | 9/11/2007  | 10/719515          | US | Method And Apparatus For Storing Data On Magnetic Tape                                                                                                       |
| 82170167     | Granted   | 7237084       | 10/27/2003  | 6/26/2007  | 10/694302          | US | Method And Program Product For Avoiding Cache Congestion By Offsetting Addresses While Allocating Memory                                                     |
| 82170341     | Granted   | 8261063       | 10/16/2003  | 9/4/2012   | 10/688397          | US | Method And Apparatus For Managing A Hierarchy Of Nodes                                                                                                       |
| 82170347     | Granted   | 7089378       | 3/27/2003   | 8/8/2006   | 10/401231          | US | Shared Receive Queues                                                                                                                                        |
| 82170356     | Granted   | 8260916       | 10/31/2003  | 9/4/2012   | 10/698016          | US | Network Server And Method Of Discovery Of A Network Node                                                                                                     |
| 82171028     | Granted   | 7287185       | 4/6/2004    | 10/23/2007 | 10/819241          | US | ARCHITECTURAL SUPPORT FOR SELECTIVE USE OF HIGH-RELIABILITY MODE IN A COMPUTER SYSTEM                                                                        |
| 82171037     | Granted   | 7203864       | 6/25/2004   | 4/10/2007  | 10/876865          | US | METHOD AND SYSTEM FOR CLUSTERING COMPUTERS INTO PEER GROUPS AND COMPARING INDIVIDUAL COMPUTERS TO THEIR PEERS                                                |

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| 82171040     | Granted | 7380177       | 6/25/2004   | 5/27/2008  | 10/876814          | US | METHOD AND SYSTEM FOR COMPARING INDIVIDUAL COMPUTERS TO CLUSTER REPRESENTATIONS OF THEIR                             |
| 82171055     | Granted | 8825902       | 10/27/2003  | 9/2/2014   | 10/694323          | US | Configuration Validation Checker                                                                                     |
| 82171157     | Granted | 8023828       | 10/17/2005  | 9/20/2011  | 11/252964          | US | Quantum Information Conversion Between Matter And                                                                    |
| 82171172     | Granted | 6817196       | 3/7/2003    | 11/16/2004 | 10/384456          | US | Representations                                                                                                      |
| 82171226     | Granted | 7529360       | 11/12/2003  | 5/5/2009   | 10/704605          | US | Spray Cooling System With Cooling Regime Detection                                                                   |
| 82171241     | Granted | 7296181       | 4/6/2004    | 11/13/2007 | 10/818993          | US | METHOD AND SYSTEM FOR CONNECTING CALLS                                                                               |
| 82171301     | Granted | 7136931       | 10/20/2003  | 11/14/2006 | 10/687663          | US | Lockstep Error Signaling                                                                                             |
| 82171400     | Granted | 7349527       | 1/30/2004   | 3/25/2008  | 10/769137          | US | Method And System For Identifying The Health Of Virtual Routers                                                      |
| 82171481     | Granted | 7478154       | 6/26/2003   | 1/13/2009  | 10/608585          | US | System And Method For Extracting Demographic Information                                                             |
| 82171676     | Granted | 7653051       | 1/13/2004   | 1/26/2010  | 10/757807          | US | Storage System With Link Selection Control                                                                           |
| 82171778     | Granted | 7730472       | 9/24/2004   | 40330      | 10/949124          | US | Signaling Gateway Aggregation                                                                                        |
| 82171787     | Granted | 7761421       | 5/16/2003   | 7/20/2010  | 10/440548          | US | Dynamic Linking Of Modules In A Pre-operating System Environment                                                     |
| 82171799     | Granted | 7237067       | 4/22/2004   | 6/26/2007  | 10/829186          | US | Read, Write, And Recovery Operations For Replicated Data                                                             |
| 82171802     | Granted | 7505967       | 1/21/2004   | 3/17/2009  | 10/761642          | US | Managing A Multi-way Associative Cache                                                                               |
| 82171856     | Granted | 7345891       | 10/7/2003   | 3/18/2008  | 10/680445          | US | Displaying Metrics From An Alternative Representation Of A Database                                                  |
| 82171862     | Granted | 7646595       | 2/20/2008   | 1/12/2010  | 12/034646          | US | Circuit Board Assembly                                                                                               |
| 82171922     | Granted | 7349906       | 7/15/2003   | 3/25/2008  | 10/619805          | US | Computing Device                                                                                                     |
| 82171925     | Granted | 7523217       | 7/15/2003   | 4/21/2009  | 10/619737          | US | SYSTEM AND METHOD HAVING IMPROVED EFFICIENCY FOR DISTRIBUTING A FILE AMONG A PLURALITY OF RECIPIENTS                 |
| 82171988     | Granted | 6931350       | 8/28/2003   | 8/16/2005  | 10/650589          | US | System And Method Having Improved Efficiency And Reliability For Distributing A File Among A Plurality Of Recipients |
| 82172045     | Granted | 6879178       | 12/22/2003  | 4/12/2005  | 10/745101          | US | Regression-Clustering For Complex Real-World Data                                                                    |
| 82172279     | Granted | 7613961       | 10/14/2003  | 11/3/2009  | 10/685177          | US | Measuring Current On A Die                                                                                           |
| 82172285     | Granted | 7328380       | 9/11/2003   | 2/5/2008   | 10/659901          | US | CPU Register Diagnostic Testing                                                                                      |
| 82172420     | Granted | 7370248       | 11/7/2003   | 5/6/2008   | 10/704478          | US | Memory Scrubbing Logic                                                                                               |
| 82172465     | Granted | 7398181       | 6/2/2004    | 7/8/2008   | 10/858743          | US | In-service Raid Mirror Reconfiguring                                                                                 |
| 82172468     | Granted | 7006949       | 1/27/2004   | 2/28/2006  | 10/766360          | US | METHOD FOR RETRIEVING RELIABILITY DATA IN A SYSTEM                                                                   |
| 82172969     | Granted | 7272548       | 6/5/2003    | 9/18/2007  | 10/456199          | US | METHOD AND SYSTEM FOR Collecting Temperature Data                                                                    |
| 82173029     | Granted | 7523346       | 2/17/2006   | 4/21/2009  | 11/356560          | US | Method Of Simulating An Enterprise Computing Management System                                                       |
| 82173038     | Granted | 7673171       | 2/17/2006   | 3/2/2010   | 11/356548          | US | Systems And Methods For CPU Repair                                                                                   |
|              |         |               |             |            |                    |    | Systems And Methods For CPU Repair                                                                                   |

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| 82173044     | Granted   | 7917804       | 2/17/2006   | 3/29/2011  | 11/356756 US       |    | Systems And Methods For CPU Repair                                                                                                                                                    |
| 82173050     | Granted   | 7607040       | 2/17/2006   | 10/20/2009 | 11/356759 US       |    | Methods And Systems For Conducting Processor Health-<br>checks                                                                                                                        |
| 82173275     | Granted   | D507000       | 6/14/2004   | 7/5/2005   | 29/207434 US       |    | Computer Having A Front Bezel                                                                                                                                                         |
| 82173482     | Granted   | 7415570       | 10/15/2004  | 8/19/2008  | 10/965200 US       |    | TAPE DRIVE APPARATUS HAVING A PERMANENT OPTICAL<br>STORAGE DEVICE PORT                                                                                                                |
| 82173590     | Granted   | 7275020       | 12/23/2003  | 9/25/2007  | 10/742776 US       |    | Method And System For Testing A Computer System By<br>Applying A Load                                                                                                                 |
| 82173665     | Granted   | 7310751       | 2/20/2004   | 12/18/2007 | 10/783112 US       |    | TIMEOUT EVENT TRIGGER GENERATION                                                                                                                                                      |
| 82173716     | Published |               | 3/26/2004   |            | 10/811259 US       |    | Access Point That Monitors Guest Usage                                                                                                                                                |
| 82173722     | Granted   | 7752602       | 9/28/2004   | 7/6/2010   | 10/953255 US       |    | Reversible Atomic Steps To Undo Application Startup                                                                                                                                   |
| 82173788     | Granted   | 8356098       | 11/10/2003  | 1/15/2013  | 10/704875 US       |    | Dynamic Management Of Workloads In Clusters                                                                                                                                           |
| 82173791     | Granted   | 7954086       | 5/19/2003   | 5/31/2011  | 10/440144 US       |    | Self-describing Kernel Modules                                                                                                                                                        |
| 82173959     | Granted   | 6999268       | 8/12/2003   | 2/14/2006  | 10/639335 US       |    | Method And System Of A Head For A Storage Media                                                                                                                                       |
| 82174022     | Granted   | 7426728       | 9/24/2003   | 9/16/2008  | 10/670026 US       |    | Reducing Latency When Accessing Task Priority Levels                                                                                                                                  |
| 82174028     | Published |               | 2/21/2006   |            | 11/358597 US       |    | Method Of Providing System Design                                                                                                                                                     |
| 82174031     | Granted   | 7421462       | 11/12/2003  | 9/2/2008   | 10/706172 US       |    | Method And Apparatus For Generating A Random Bit Stream                                                                                                                               |
| 82174034     | Granted   | 7302457       | 11/12/2003  | 11/27/2007 | 10/706181 US       |    | Method And Apparatus For Providing Random Bits                                                                                                                                        |
| 82174157     | Granted   | 7625214       | 9/21/2005   | 12/1/2009  | 11/231950 US       |    | HIGH DENSITY POWER CONNECTOR WITH IMPEDANCE<br>CONTROL                                                                                                                                |
| 82174163     | Granted   | 7272733       | 9/26/2003   | 9/18/2007  | 10/672101 US       |    | METHOD OF PROVIDING DYNAMIC POWER REDUNDANCY<br>BASED ON A DIFFERENCE OF CURRENT POWER UNITS AND<br>CURRENTLY NEEDED POWER UNITS                                                      |
| 82174166     | Granted   | 7222246       | 9/26/2003   | 5/22/2007  | 10/672119 US       |    | METHOD FOR DETERMINING NUMBER OF DYNAMICALLY<br>TEMPERATURE-ADJUSTED POWER SUPPLY UNITS NEEDED TO<br>SUPPLY POWER ACCORDING TO MEASURE OPERATING<br>TEMPERATURE OF POWER SUPPLY UNITS |
| 82174169     | Granted   | 7310623       | 12/12/2003  | 12/18/2007 | 10/734713 US       |    | Games Using Pair-wise Entanglements                                                                                                                                                   |
| 82174220     | Granted   | 7068509       | 2/3/2004    | 6/27/2006  | 10/772115 US       |    | Small Form Factor Cooling System                                                                                                                                                      |
| 82174223     | Granted   | 7203063       | 5/21/2004   | 4/10/2007  | 10/849759 US       |    | Small Form Factor Liquid Loop Cooling System                                                                                                                                          |
| 82174295     | Granted   | 7764689       | 9/16/2005   | 7/27/2010  | 11/229109 US       |    | Method And Apparatus For Arbitrating Data Packets In A<br>Network System                                                                                                              |
| 82174301     | Granted   | 7697690       | 7/21/2003   | 4/13/2010  | 10/624403 US       |    | Windowed Backward Key Rotation                                                                                                                                                        |
| 82174472     | Granted   | 7930539       | 8/3/2004    | 4/19/2011  | 10/910652 US       |    | Computer System Resource Access Control                                                                                                                                               |
| 82174481     | Granted   | 8749986       | 12/21/2005  | 6/10/2014  | 11/314479 US       |    | Flexible Midplane And Architecture For A Multi-processor<br>Computer System                                                                                                           |
| 82174610     | Granted   | 6989753       | 12/12/2003  | 1/24/2006  | 10/734444 US       |    | METHOD OF AND COMPUTER FOR IDENTIFYING REMINDER<br>EVENT                                                                                                                              |

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|--------------|---------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 821/74649    | Granted | 7214131       | 1/15/2004   | 5/8/2007   | 10/7/59849         | US | Airflow Distribution Control System For Usage In A Raised floor Data Center                                                                           |
| 821/74673    | Granted | 9160571       | 3/11/2004   | 10/13/2015 | 10/7/97152         | US | Requesting A Service From A Multicast Network                                                                                                         |
| 821/74796    | Granted | 7844967       | 5/19/2004   | 11/30/2010 | 10/850318          | US | Method Of Allocating Computing Resources                                                                                                              |
| 821/74964    | Granted | 8720532       | 4/29/2004   | 5/13/2014  | 10/836665          | US | Controllable Flow Resistance In A Cooling Apparatus                                                                                                   |
| 821/74979    | Granted | 8020608       | 8/31/2004   | 9/20/2011  | 10/931099          | US | Heat Sink Fin With Stator Blade                                                                                                                       |
| 821/75162    | Granted | 8364948       | 12/15/2004  | 1/29/2013  | 11/013197          | US | System And Method For Supporting Secured Communication By An Aliased Cluster                                                                          |
| 821/75396    | Granted | 7551614       | 12/14/2004  | 6/23/2009  | 11/013138          | US | Aggregation Over Multiple Processing Nodes Of Network Resources Each Providing Offloaded Connections Between Applications Over A Network              |
| 821/75399    | Granted | 7273088       | 12/17/2003  | 9/25/2007  | 10/7/38435         | US | One Or More Heat Exchanger Components In Major Part Operably Locatable Outside Computer Chassis                                                       |
| 821/75420    | Granted | 7634784       | 3/9/2005    | 12/15/2009 | 11/076324          | US | Data Storage Means                                                                                                                                    |
| 821/75423    | Granted | 7921439       | 10/31/2009  | 4/5/2011   | 12/610273          | US | Data Storage Means                                                                                                                                    |
| 821/75474    | Granted | 8966506       | 4/23/2004   | 42059      | 10/831469          | US | Method And Apparatus For Managing Related Drivers Associated With A Virtual Bus Driver                                                                |
| 821/75477    | Granted | 7454488       | 9/23/2003   | 11/18/2008 | 10/667332          | US | Method And System For Managing A Network Of Nodes                                                                                                     |
| 821/75483    | Granted | 7343059       | 10/11/2003  | 3/11/2008  | 10/684278          | US | Photonic Interconnect System                                                                                                                          |
| 821/75546    | Granted | 7143097       | 7/30/2003   | 11/28/2006 | 10/632233          | US | Method And Apparatus For Migrating File Locks From One Server To Another                                                                              |
| 821/75660    | Granted | 8291061       | 10/8/2003   | 10/16/2012 | 10/681782          | US | A Method And System For Business-oriented Web Services Management                                                                                     |
| 821/75963    | Granted | 7509651       | 5/23/2003   | 3/24/2009  | 10/445237          | US | System And Method For Providing Event Notifications To Information Technology Resource Managers                                                       |
| 821/76398    | Granted | 8424023       | 10/24/2003  | 41380      | 10/692939          | US | Program Interface Architecture                                                                                                                        |
| 821/76482    | Allowed |               | 12/16/2003  |            | 10/7/37374         | US | Persistent Memory Device For Backup Process Checkpoint States                                                                                         |
| 821/76530    | Granted | 7361081       | 7/23/2004   | 4/22/2008  | 10/898736          | US | Small Form Factor Air Jet Cooling System                                                                                                              |
| 821/76536    | Granted | 7447971       | 5/14/2004   | 11/4/2008  | 11/089578          | US | Data Recovery Systems And Methods                                                                                                                     |
| 821/76671    | Granted | 7669246       | 6/16/2004   | 2/23/2010  | 10/869765          | US | System And Method For Linking User Accounts To Business Entitlement Objects                                                                           |
| 821/76917    | Granted | 7765550       | 5/26/2005   | 7/27/2010  | 11/139840          | US | SYSTEM FOR CONTROLLING CONTEXT SWITCH OF DEFERRED REQUESTS USING COUNTER AND FLAG SETTING OF THREAD ACCESSING SHARED RESOURCE OR ENTERING CODE REGION |
| 821/76923    | Granted | 7577945       | 5/26/2005   | 8/18/2009  | 11/139814          | US | Memory Mapped Lazy Signal Blocking                                                                                                                    |
| 821/77109    | Granted | 7706382       | 9/21/2004   | 4/27/2010  | 10/944894          | US | Method And System For Managing A Network Having Multiple Domains                                                                                      |

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| 82177148     | Granted | 7002799       | 4/19/2004   | 2/21/2006  | 10/828448          | US | External Liquid Loop Heat Exchanger For An Electronic System                                                                                                |
| 82177349     | Granted | 7496657       | 6/13/2003   | 2/24/2009  | 10/460307          | US | Method And System For Determining A Source Of A Virtual Circuit Fault                                                                                       |
| 82177526     | Granted | 7380138       | 4/22/2004   | 5/27/2008  | 10/831350          | US | Cryptographic Method And Apparatus                                                                                                                          |
| 82177769     | Granted | 7270572       | 7/30/2004   | 9/18/2007  | 11/089579          | US | Component Connector                                                                                                                                         |
| 82177853     | Granted | 7580415       | 4/27/2005   | 8/25/2009  | 11/116885          | US | Aggregation Of Hybrid Network Resources Operable To Support Both Offloaded And Non-offloaded Connections                                                    |
| 82177919     | Granted | 7313461       | 11/26/2003  | 12/25/2007 | 10/721264          | US | Data Connectivity With A Robotic Device                                                                                                                     |
| 82177961     | Granted | 7065697       | 7/29/2003   | 6/20/2006  | 10/632207          | US | Systems And Methods Of Partitioning Data To Facilitate Error Correction                                                                                     |
| 82177967     | Granted | 7051265       | 7/29/2003   | 38860      | 10/632206          | US | Systems And Methods Of Routing Data To Facilitate Error Correction                                                                                          |
| 82178018     | Granted | 7720139       | 7/28/2005   | 5/18/2010  | 11/191730          | US | Equaliser Circuit                                                                                                                                           |
| 82178168     | Granted | 7181586       | 4/5/2004    | 2/20/2007  | 10/816897          | US | Formatting A Data Storage Medium To A Desired Block Format                                                                                                  |
| 82178207     | Granted | 8078705       | 4/5/2004    | 12/13/2011 | 10/818549          | US | Key-configured Topology With Connection Management                                                                                                          |
| 82178342     | Granted | 7827144       | 11/17/2005  | 11/2/2010  | 11/283471          | US | Methods Of Reading And Writing Data                                                                                                                         |
| 82178405     | Granted | 7366956       | 6/16/2004   | 4/29/2008  | 10/870722          | US | Detecting Data Races In Multithreaded Computer Programs                                                                                                     |
| 82178459     | Granted | 7653108       | 9/9/2004    | 1/26/2010  | 10/936874          | US | Apparatus And Method Of Establishing Optical Communication Channels Between A Steerable Array Of Laser Emitters And An Array Of Optical Detectors           |
| 82178462     | Granted | 9142938       | 12/3/2009   | 9/22/2015  | 12/630044          | US | APPARATUS AND METHOD OF ESTABLISHING OPTICAL COMMUNICATION CHANNELS BETWEEN A STEERABLE ARRAY OF LASER EMITTERS AND AN ARRAY OF OPTICAL DETECTORS           |
| 82178468     | Granted | 7809278       | 7/26/2004   | 10/5/2010  | 10/898834          | US | Apparatus And Method Of Providing Separate Control And Data Channels Between Arrays Of Light Emitters And Detectors For Optical Communication And Alignment |
| 82178471     | Granted | 7400790       | 11/3/2004   | 7/15/2008  | 10/980595          | US | Optical Connections And Methods Of Forming Optical Connections                                                                                              |
| 82178477     | Granted | 8059927       | 2/22/2010   | 11/15/2011 | 12/710336          | US | Optical Connections And Methods Of Forming Optical Connections                                                                                              |
| 82178480     | Granted | 7118285       | 11/3/2004   | 10/10/2006 | 10/980746          | US | Optical Connections And Methods Of Forming Optical Connections                                                                                              |
| 82178519     | Granted | 7228462       | 1/23/2004   | 6/5/2007   | 10/764165          | US | Cluster Node Status Detection And Communication                                                                                                             |
| 82178528     | Granted | 6928589       | 1/23/2004   | 8/9/2005   | 10/764244          | US | Node Management In High-Availability Cluster                                                                                                                |
| 82178657     | Granted | 7617376       | 8/14/2003   | 11/10/2009 | 10/641127          | US | Method And Apparatus For Accessing A Memory                                                                                                                 |
| 82178660     | Granted | 8959171       | 9/18/2003   | 2/17/2015  | 10/666174          | US | Method And Apparatus For Acknowledging A Request For Data Transfer                                                                                          |

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| 821/8663     | Granted | 7302679       | 10/31/2003  | 39413      | 10/699067          | US | Scalable Cross-file Inlining Through Locality-based Transformation Ordering                                  |
| 821/8666     | Granted | 7231543       | 1/14/2004   | 6/12/2007  | 10/7/58570         | US | Systems And Methods For Fault-tolerant Processing With Processor Regrouping Based On Connectivity Conditions |
| 821/8720     | Granted | 7656906       | 1/21/2005   | 2/2/2010   | 11/040940          | US | System And Method For Communicating A Timing Signal Between Backplanes                                       |
| 821/8723     | Granted | 7814467       | 1/15/2004   | 10/12/2010 | 10/7/58376         | US | PROGRAM OPTIMIZATION USING OBJECT FILE SUMMARY INFORMATION                                                   |
| 821/8729     | Granted | 7589560       | 10/19/2006  | 9/15/2009  | 11/583322          | US | Apparatus For Configuring I/O Signal Levels Of Interfacing Logic Circuits                                    |
| 821/8732     | Granted | 7719312       | 7/2/2009    | 5/18/2010  | 12/458204          | US | Apparatus For Configuring I/O Signal Levels Of Interfacing Logic Circuits                                    |
| 821/8792     | Granted | 7426725       | 2/20/2004   | 9/16/2008  | 10/7/83761         | US | Cross-module In-lining                                                                                       |
| 821/8837     | Granted | 8549186       | 2/17/2005   | 10/1/2013  | 11/060720          | US | System And Method For Sharing A Device Across Operating Systems                                              |
| 821/8849     | Granted | 7434128       | 3/24/2005   | 10/7/2008  | 11/088648          | US | Systems And Methods For Identifying System Links                                                             |
| 821/8858     | Granted | 7555665       | 12/29/2004  | 6/30/2009  | 11/025703          | US | Method And Apparatus Of Disabling Converters In A Power Module                                               |
| 821/8891     | Granted | 8145741       | 1/8/2010    | 3/27/2012  | 12/684468          | US | Method And Apparatus For Designing Multi-tier Systems                                                        |
| 821/8957     | Granted | 8150996       | 12/16/2003  | 4/3/2012   | 10/7/37207         | US | Method And Apparatus For Handling Flow Control For A Data Transfer                                           |
| 821/9020     | Granted | 7248942       | 2/19/2004   | 7/24/2007  | 10/7/80631         | US | Airflow Detection System Having An Airflow Indicating Device                                                 |
| 821/9221     | Granted | 8028174       | 5/4/2005    | 9/27/2011  | 11/121892          | US | Controlling Update Of Content Of A Programmable Read-only Memory                                             |
| 821/9224     | Granted | 7549039       | 7/29/2005   | 6/16/2009  | 11/193680          | US | Generating An Interrupt In A System Having Plural Partitions That Share A Resource                           |
| 821/9338     | Granted | 7068508       | 12/8/2003   | 6/27/2006  | 10/7/28889         | US | DOCKING STATION COOLING SYSTEM INCLUDING LIQUID-FILLED HOLLOW STRUCTURE                                      |
| 821/9521     | Granted | 7434008       | 4/23/2004   | 10/7/2008  | 10/831050          | US | SYSTEM AND METHOD FOR COHERENCY FILTERING                                                                    |
| 821/9527     | Granted | 8205046       | 1/31/2005   | 6/19/2012  | 11/047539          | US | System And Method For Snooping Cache Information Using A Directory Crossbar                                  |
| 821/9530     | Granted | 7254027       | 12/21/2004  | 8/7/2007   | 11/021504          | US | Processor Module For System Board                                                                            |
| 821/9536     | Granted | 7072185       | 12/21/2004  | 7/4/2006   | 11/021527          | US | Electronic Module For System Board With Pass-thru Holes                                                      |
| 821/9542     | Granted | 7327569       | 12/13/2004  | 2/5/2008   | 11/011328          | US | Processor Module With Thermal Dissipation Device                                                             |
| 821/9641     | Granted | 8806103       | 4/28/2004   | 8/12/2014  | 10/833582          | US | System And Method For Interleaving Memory                                                                    |
| 821/9656     | Granted | 7451302       | 3/10/2004   | 11/11/2008 | 10/7/97530         | US | System And Method For Managing Configuration Data For A Multi-cell Computer System                           |
| 821/9788     | Granted | 7388200       | 10/19/2006  | 6/17/2008  | 11/583262          | US | SENSING METHOD AND NANOSENSING DEVICE FOR PERFORMING THE SAME                                                |

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| 82179845     | Granted | 7484125       | 12/15/2003  | 1/27/2009  | 10/737111          | US | Method And Apparatus For Providing Updated Processo       |
|              |         |               |             |            |                    |    | Polling Information                                       |
| 82179854     | Granted | 7752500       | 12/19/2008  | 7/6/2010   | 12/339646          | US | Method And Apparatus For Providing Updated Processo       |
|              |         |               |             |            |                    |    | Polling Information                                       |
| 82179857     | Granted | 7484065       | 4/20/2004   | 1/27/2009  | 10/827946          | US | Selective Memory Allocation                               |
| 82180100     | Granted | 8090914       | 1/20/2004   | 1/3/2012   | 10/760652          | US | System And Method For Creating Ordering Points            |
| 82180103     | Granted | 7395374       | 1/20/2004   | 7/1/2008   | 10/760651          | US | System And Method For Conflict Responses In A Cache       |
|              |         |               |             |            |                    |    | Coherency Protocol With Ordering Point Migration          |
| 82180151     | Granted | 8468308       | 1/20/2004   | 6/18/2013  | 10/760659          | US | System And Method For Non-migratory Requests In A Cache   |
|              |         |               |             |            |                    |    | Coherency Protocol                                        |
| 82180157     | Granted | 7620696       | 1/20/2004   | 11/17/2009 | 10/761047          | US | System And Method For Conflict Responses In A Cache       |
|              |         |               |             |            |                    |    | Coherency Protocol                                        |
| 82180160     | Granted | 7177987       | 1/20/2004   | 2/13/2007  | 10/760436          | US | System And Method For Responses Between Different Cache   |
|              |         |               |             |            |                    |    | Coherency Protocols                                       |
| 82180202     | Granted | 7363427       | 1/12/2004   | 4/22/2008  | 10/756446          | US | Memory Controller Connection To RAM Using Buffer          |
|              |         |               |             |            |                    |    | Interface                                                 |
| 82180208     | Granted | 8612684       | 12/7/2007   | 12/17/2013 | 11/999834          | US | Memory Controller Connection To RAM Using Buffer          |
|              |         |               |             |            |                    |    | Interface                                                 |
| 82180217     | Granted | 7484237       | 5/13/2004   | 1/27/2009  | 10/844342          | US | METHOD AND APPARATUS FOR ROLE-BASED SECURITY              |
|              |         |               |             |            |                    |    | POLICY MANAGEMENT                                         |
| 82180394     | Granted | 7492979       | 9/27/2004   | 2/17/2009  | 10/951916          | US | Photonic Crystal Laser Sensors And Methods                |
| 82180403     | Granted | 7289221       | 9/27/2004   | 10/30/2007 | 10/951918          | US | Mesh Zehnder Photonic Crystal Sensors And Methods         |
| 82180418     | Granted | 7240165       | 1/15/2004   | 7/3/2007   | 10/758473          | US | System And Method For Providing Parallel Data Requests    |
| 82180532     | Granted | 7310762       | 1/12/2004   | 12/18/2007 | 10/756439          | US | Detection Of Errors                                       |
| 82180541     | Granted | 7461321       | 2/11/2005   | 12/2/2008  | 11/056472          | US | Error Detection                                           |
| 82180583     | Granted | 7457888       | 1/12/2004   | 11/25/2008 | 10/756448          | US | DATA DELIVERY BASED ON A SELECT DATA DELIVERY             |
|              |         |               |             |            |                    |    | PERFORMANCE PARAMETER IN A DATA PROCESSING SYSTEM         |
| 82180589     | Granted | 7277994       | 9/23/2004   | 10/2/2007  | 10/947673          | US | Communication In Partitioned Computer Systems             |
| 82180646     | Granted | 7624213       | 2/11/2005   | 11/24/2009 | 11/056471          | US | Passing Identification Information                        |
| 82180766     | Granted | 7098679       | 1/7/2004    | 8/29/2006  | 10/753142          | US | Circuit Tester Interface                                  |
| 82180775     | Granted | 7447222       | 11/12/2003  | 11/4/2008  | 10/706653          | US | Automated Path Tracing Through Switching Mesh             |
| 82180787     | Granted | 7284087       | 11/22/2004  | 10/16/2007 | 10/994991          | US | Method And Apparatus For Increasing Sustainable Bandwidth |
|              |         |               |             |            |                    |    | In A Multiple Disk Drive Storage System                   |
| 82180790     | Granted | 8316234       | 10/28/2003  | 11/20/2012 | 10/695198          | US | ENCODED ATTRIBUTE MATCHING ON COMMUNICATION               |
|              |         |               |             |            |                    |    | DEVICES                                                   |
| 82180850     | Granted | 8370478       | 9/7/2004    | 2/5/2013   | 10/935631          | US | Testing A Data Communication Architecture                 |
| 82180919     | Granted | 7613958       | 1/12/2004   | 11/3/2009  | 10/756529          | US | ERROR DETECTION IN A SYSTEM HAVING COUPLED                |
|              |         |               |             |            |                    |    | CHANNELS                                                  |
| 82180958     | Granted | 8898246       | 7/29/2004   | 11/25/2014 | 10/902341          | US | Communication Among Partitioned Devices                   |

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| 82180967     | Granted | 7577890       | 1/21/2005   | 8/18/2009  | 11/040380          | US | Systems And Methods For Mitigating Latency Associated With Error Detection And Correction        |
| 82180973     | Granted | 7480755       | 12/8/2004   | 1/20/2009  | 11/006964          | US | Trap Mode Register                                                                               |
| 82181105     | Granted | 7672929       | 12/22/2004  | 3/2/2010   | 11/024584          | US | Database Modification History                                                                    |
| 82181165     | Granted | 7643029       | 2/6/2004    | 1/5/2010   | 10/774315          | US | Method And System For Automated Visual Comparison Based On User Drilldown Sequences              |
| 82181219     | Granted | 7370300       | 11/9/2004   | 5/6/2008   | 10/984245          | US | Systems And Methods Of Simulating Signal Coupling                                                |
| 82181273     | Granted | 7464280       | 6/22/2005   | 12/9/2008  | 11/158430          | US | Power Module For A Plurality Of Processors                                                       |
| 82181294     | Granted | 7187380       | 10/30/2003  | 3/6/2007   | 10/701470          | US | Telecommunications Graphical Service Program                                                     |
| 82181399     | Granted | 7805563       | 4/28/2005   | 9/28/2010  | 11/117256          | US | Tape Drive Apparatus                                                                             |
| 82181540     | Granted | 8103651       | 4/13/2004   | 1/24/2012  | 10/823470          | US | Auto-updating Reader Program For Document Files                                                  |
| 82181543     | Granted | 8650500       | 3/5/2004    | 2/11/2014  | 10/794971          | US | Copy-and-Paste Functionality For Network Reconfiguration                                         |
| 82181606     | Granted | 7809991       | 1/11/2005   | 10/5/2010  | 11/033226          | US | System And Method To Qualify Data Capture                                                        |
| 82181729     | Granted | 7345381       | 1/25/2005   | 3/18/2008  | 11/042691          | US | Converter To Provide An Output Voltage For Plural Input Voltages                                 |
| 82181792     | Granted | 7647490       | 2/11/2004   | 1/12/2010  | 10/777438          | US | Method And Apparatus For Providing Updated System Locality Information During Runtime            |
| 82181891     | Granted | 7380080       | 1/10/2005   | 5/27/2008  | 11/032769          | US | CALCULATING UNNEEDED DATA STORAGE CREDITS FOR A DATA TRANSMISSION TO A PAIR OF STORAGE DEVICES   |
| 82181897     | Granted | 8924662       | 4/9/2008    | 12/30/2014 | 12/100013          | US | CREDIT-BASED STORAGE DEVICE FLOW CONTROL (as amended)                                            |
| 82181918     | Granted | 7496087       | 7/23/2004   | 2/24/2009  | 10/573407          | US | Methods And Apparatus For Controlling Signalling Gateways                                        |
| 82181951     | Granted | 7383409       | 1/13/2004   | 6/3/2008   | 10/756638          | US | Cache Systems And Methods For Employing Speculative Fills                                        |
| 82182035     | Granted | 7409503       | 1/13/2004   | 8/5/2008   | 10/756644          | US | REGISTER FILE SYSTEMS AND METHODS FOR EMPLOYING SPECULATIVE FILLS                                |
| 82182038     | Granted | 7360069       | 1/13/2004   | 4/15/2008  | 10/756639          | US | Systems And Methods For Executing Across At Least One Memory Barrier Employing Speculative Fills |
| 82182041     | Granted | 7409500       | 1/13/2004   | 8/5/2008   | 10/755938          | US | Systems And Methods For Employing Speculative Fills                                              |
| 82182224     | Granted | 7065620       | 9/8/2003    | 6/20/2006  | 10/657475          | US | Systems And Methods For Backing Up Data                                                          |
| 82182275     | Granted | 7348799       | 1/11/2005   | 3/25/2008  | 11/032949          | US | System And Method For Generating A Trigger Signal                                                |
| 82182284     | Granted | 7752016       | 1/11/2005   | 7/6/2010   | 11/032743          | US | System And Method For Data Analysis                                                              |
| 82182344     | Granted | 7859847       | 12/29/2004  | 12/28/2010 | 11/027337          | US | Spring Adapted To Hold Electronic Device In A Frame                                              |
| 82182395     | Granted | 7382880       | 1/26/2004   | 6/3/2008   | 10/764966          | US | Method And Apparatus For Initializing Multiple Security Modules                                  |
| 82182398     | Granted | 7930503       | 1/26/2004   | 4/19/2011  | 10/764918          | US | Method And Apparatus For Operating Multiple Security Modules                                     |
| 82182404     | Granted | 7404178       | 2/18/2004   | 7/22/2008  | 10/780967          | US | Rom-embedded Debugging Of Computer                                                               |

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| 82182476     | Granted | 7188203       | 11/22/2004  | 3/6/2007   | 10/994993          | US | Method And Apparatus For Dynamic Suppression Of Spurious Interrupts                                                                       |
| 82182479     | Granted | 7334028       | 11/25/2003  | 2/19/2008  | 10/722337          | US | Tiered Multi-source Software Support Using Automated Diagnostic-data Transfers                                                            |
| 82182518     | Granted | 8131830       | 4/19/2004   | 3/6/2012   | 10/828078          | US | System And Method For Providing Support Services Using Administrative Rights On A Client Computer                                         |
| 82182596     | Granted | 8677017       | 1/30/2004   | 3/18/2014  | 10/767075          | US | Determining Location Information For A Node In A Network Using At Least One Local Landmark Node                                           |
| 82182665     | Granted | 8060650       | 10/27/2004  | 11/15/2011 | 10/974459          | US | Diagnosing A Path In A Storage Network                                                                                                    |
| 82182839     | Granted | 6940778       | 10/29/2003  | 9/6/2005   | 10/697679          | US | System And Method For Reducing Leakage In Memory Cells Using Wordline Control                                                             |
| 82182851     | Granted | 8120876       | 7/30/2004   | 2/21/2012  | 10/902702          | US | MEDIUM FOR USE IN A TAPE DRIVE APPARATUS HAVING IDENTIFICATION SEGMENT AND A SEGMENT IDENTIFICATION PATTERN                               |
| 82182914     | Granted | 7866959       | 1/24/2005   | 1/11/2011  | 11/042917          | US | Fan Clutch For An Electronics Cooling Fan                                                                                                 |
| 82182968     | Granted | 7830894       | 7/29/2004   | 11/9/2010  | 10/901379          | US | Communications                                                                                                                            |
| 82183088     | Granted | 7613950       | 2/27/2004   | 11/3/2009  | 10/789733          | US | Detecting Floating Point Hardware Failures                                                                                                |
| 82183154     | Granted | 7606995       | 7/23/2004   | 10/20/2009 | 10/898590          | US | ALLOCATING RESOURCES TO PARTITIONS IN A PARTITIONABLE COMPUTER                                                                            |
| 82183163     | Granted | 8112611       | 7/27/2009   | 2/7/2012   | 12/510184          | US | Allocating Resources To Partitions In A Partitionable Computer                                                                            |
| 82183202     | Granted | 6867976       | 10/21/2003  | 3/15/2005  | 10/690450          | US | Pin Retention For Thermal Transfer Interfaces, And Associated Methods                                                                     |
| 82183208     | Granted | 7310738       | 2/9/2005    | 12/18/2007 | 11/054588          | US | MULTIFUNCTIONAL CONTROL OF COOLING SYSTEMS FOR COMPUTERS                                                                                  |
| 82183277     | Granted | 7269018       | 9/3/2004    | 9/11/2007  | 10/934926          | US | Method And Apparatus For Attaching Multiple Heat Sinks To Multiple Non-coplanar Components                                                |
| 82183328     | Granted | 7149831       | 9/27/2004   | 12/12/2006 | 10/950994          | US | Batch Processing Of Interrupts                                                                                                            |
| 82183388     | Granted | 7292573       | 3/31/2004   | 11/6/2007  | 10/813766          | US | Methods And Apparatus For Selection Of Mirrored Traffic                                                                                   |
| 82183457     | Granted | 7616440       | 4/19/2004   | 11/10/2009 | 10/827965          | US | Fan Unit And Methods Of Forming Same                                                                                                      |
| 82183460     | Granted | 7855882       | 12/24/2008  | 12/21/2010 | 12/344111          | US | Fan Unit And Methods Of Forming Same                                                                                                      |
| 82183889     | Granted | 7664994       | 9/8/2004    | 2/16/2010  | 10/935882          | US | High-availability Cluster Node Removal And Communication                                                                                  |
| 82183901     | Granted | 7257514       | 4/6/2005    | 8/14/2007  | 11/099851          | US | COMPUTER SUPPORT SERVICE WITH SOLUTION FUNCTION UPDATES AS A FUNCTION OF PRE-DELIVERY EXPERT CHANGES TO AUTOMATICALLY GENERATED SOLUTIONS |

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| 82183907     | Granted | 7580906       | 7/31/2007   | 8/25/2009  | 11/831508          | US | AN AUTOMATED ADAPTIVE COMPUTER SUPPORT SYSTEM FOR GENERATING PROBLEM SOLUTIONS HAVING CONFIDENCE LEVELS USED TO DETERMINE WHETHER HUMAN EXPERT INTERVENTION IS REQUIRED                                      |
| 82184198     | Granted | 8242380       | 4/16/2008   | 8/14/2012  | 12/148017          | US | Printed Circuit Board Substrate And Method For Constructing Same                                                                                                                                             |
| 82184204     | Granted | 7346824       | 12/23/2004  | 3/18/2008  | 11/022023          | US | Match Circuit For Performing Pattern Recognition In A Performance Counter                                                                                                                                    |
| 82184276     | Granted | 7382847       | 7/23/2004   | 6/3/2008   | 10/898404          | US | Programmable SYNC Pulse Generator                                                                                                                                                                            |
| 82184282     | Granted | 7340631       | 7/23/2004   | 3/4/2008   | 10/897729          | US | Drift-tolerant SYNC Pulse Circuit In A SYNC Pulse Generator                                                                                                                                                  |
| 82184327     | Granted | 7756614       | 2/27/2004   | 7/13/2010  | 10/789669          | US | Mobile Device Control System                                                                                                                                                                                 |
| 82184342     | Granted | 8503429       | 3/15/2005   | 8/6/2013   | 10/592394          | US | Session Initiation Protocol (SIP)                                                                                                                                                                            |
| 82184351     | Granted | 7404204       | 2/6/2004    | 7/22/2008  | 10/773973          | US | System And Method For Authentication Via A Single Sign-on Server                                                                                                                                             |
| 82184471     | Granted | 7436917       | 7/29/2004   | 10/14/2008 | 10/901773          | US | Controller For Clock Synchronizer                                                                                                                                                                            |
| 82184513     | Granted | 7600169       | 11/12/2004  | 10/6/2009  | 10/987025          | US | Systems And Methods Of Test Case Generation With Feedback                                                                                                                                                    |
| 82184636     | Granted | 8140694       | 3/15/2004   | 3/20/2012  | 10/800828          | US | Method And Apparatus For Effecting Secure Communications                                                                                                                                                     |
| 82184699     | Granted | 7382734       | 5/20/2004   | 6/3/2008   | 10/850226          | US | Directing A Path Verification Request Along A Specific Path To A Mesh Network Switch To Test Operability Of The Specific Path                                                                                |
| 82184702     | Granted | 7203849       | 12/12/2003  | 4/10/2007  | 10/734665          | US | Method And System For Distributing Power To Networked Devices                                                                                                                                                |
| 82184705     | Granted | 7921306       | 2/16/2007   | 4/5/2011   | 11/707682          | US | Method And System For Distributing Power To Networked Devices                                                                                                                                                |
| 82184774     | Granted | 7246181       | 9/14/2004   | 7/17/2007  | 10/941583          | US | DEVICE AND METHOD FOR IDENTIFYING A COMMUNICATION INTERFACE THAT PERFORMS AN OPERATING PARAMETER CLOSER TO A DESIRED PERFORMANCE LEVEL THAN ANOTHER COMMUNICATION INTERFACE PERFORMS THE OPERATING PARAMETER |
| 82184849     | Granted | 7315456       | 8/29/2005   | 1/1/2008   | 11/214075          | US | Configurable IO Subsystem                                                                                                                                                                                    |
| 82184954     | Granted | 7363479       | 4/26/2005   | 4/22/2008  | 11/115863          | US | Methods And Apparatus For Provisioning Servers To Clients                                                                                                                                                    |
| 82185140     | Granted | 7349176       | 4/29/2005   | 3/25/2008  | 11/119146          | US | TAPE GUIDE SYSTEM FOR A MAGNETIC TAPE TRANSFER APPARATUS                                                                                                                                                     |
| 82185164     | Granted | 7372661       | 4/29/2005   | 5/13/2008  | 11/118879          | US | Tape Guide System For Engaging Different Tape Widths                                                                                                                                                         |
| 82185326     | Granted | 7727820       | 4/30/2004   | 6/1/2010   | 10/837416          | US | Misalignment-tolerant Methods For Fabricating Multiplexing/demultiplexing Architectures                                                                                                                      |
| 82185407     | Granted | 7326860       | 6/5/2006    | 2/5/2008   | 11/446669          | US | Routing Vias In A Substrate From Bypass Capacitor Pads                                                                                                                                                       |
| 82185410     | Granted | 7327583       | 9/13/2004   | 2/5/2008   | 10/939654          | US | Routing Power And Ground Vias In A Substrate                                                                                                                                                                 |

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| 82185464     | Published |               | 12/21/2004  |            | 11/020058 US       | US | Method To Dynamically View And Update Adaptive Processes Document                                                  |
| 82185467     | Granted   | 9152785       | 1/30/2004   | 10/6/2015  | 10/769594 US       | US | Providing A Flexible Protection Model In A Computer System By Decoupling Protection From Computer Privilege Levels |
| 82185581     | Granted   | 7363336       | 7/30/2004   | 4/22/2008  | 10/903218 US       | US | Delivery Of An Interruption To An Operating System                                                                 |
| 82185824     | Granted   | 7342900       | 5/19/2004   | 3/11/2008  | 10/849999 US       | US | Apparatus And Method For Estimating Device Availability                                                            |
| 82185827     | Granted   | 7086603       | 2/6/2004    | 8/8/2006   | 10/772318 US       | US | Data Collection System Having A Data Collector                                                                     |
| 82185950     | Granted   | 7853825       | 7/26/2006   | 12/14/2010 | 11/492842 US       | US | Methods And Apparatus For Recovering From Fatal Error In A System                                                  |
| 82185953     | Granted   | 7380146       | 4/22/2005   | 5/27/2008  | 11/112120 US       | US | Power Management System                                                                                            |
| 82185962     | Granted   | 7596726       | 10/31/2005  | 9/29/2009  | 11/263431 US       | US | Method And Apparatus For Selecting A Primary Resource In A Redundant Subsystem                                     |
| 82186016     | Granted   | 8095959       | 5/27/2004   | 1/10/2012  | 10/855579 US       | US | A Method And System For Integrating Policies Across Systems                                                        |
| 82186076     | Granted   | 7120022       | 3/24/2004   | 10/10/2006 | 10/808111 US       | US | Loop Thermosyphon With Wicking Structure And Semiconductor Die As Evaporator                                       |
| 82186085     | Granted   | 7106550       | 1/27/2005   | 9/12/2006  | 11/044809 US       | US | Data Storage Method And Apparatus Employing A Tape Cartridge Having A Cartridge Memory                             |
| 82186139     | Granted   | 8799706       | 1/25/2005   | 8/5/2014   | 11/042985 US       | US | Method And System Of Exchanging Information Between Processors                                                     |
| 82186154     | Granted   | 7202868       | 3/31/2004   | 4/10/2007  | 10/814403 US       | US | SYSTEM AND METHOD FOR VISUAL RECOGNITION OF PATHS AND PATTERNS                                                     |
| 82186214     | Granted   | 7274526       | 7/19/2005   | 9/25/2007  | 11/184430 US       | US | Tape Drive Apparatus                                                                                               |
| 82186445     | Allowed   |               | 7/6/2004    |            | 10/883851 US       | US | Method And System For Generating Ranges Of Internet Protocol Addresses                                             |
| 82186460     | Granted   | 7853880       | 7/28/2004   | 12/14/2010 | 10/900889 US       | US | Displaying Network Properties In A Graphical User Interface                                                        |
| 82186472     | Granted   | 7350088       | 3/8/2005    | 3/25/2008  | 11/075409 US       | US | Power Management System For UPS Attached To External Devices                                                       |
| 82186532     | Granted   | 7516212       | 1/21/2004   | 4/7/2009   | 10/761469 US       | US | Device Status Identification                                                                                       |
| 82186535     | Granted   | 8176503       | 1/27/2004   | 5/8/2012   | 10/765304 US       | US | Device Driver Selection                                                                                            |
| 82186757     | Granted   | 7519822       | 3/10/2004   | 4/14/2009  | 10/798187 US       | US | Method And Apparatus For Processing Descriptive Statements                                                         |
| 82187018     | Granted   | 8233461       | 8/19/2004   | 7/31/2012  | 10/922631 US       | US | Complementing Network Discovery With Physical Discovery                                                            |
| 82187387     | Granted   | 7405932       | 7/19/2004   | 7/29/2008  | 10/894215 US       | US | System And Method For Cooling Electronic Devices                                                                   |
| 82187447     | Granted   | 7143389       | 7/28/2004   | 11/28/2006 | 11/089581 US       | US | Systems And Methods For Generating Node Level Bypass Capacitor Models                                              |

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| 82187453     | Granted     | 7441100       | 2/27/2004   | 10/21/2008 | 10/7/89732         | US | Processor Synchronization In A Multi-processor Computer System                                                       |
| 82187522     | Granted     | 7233497       | 10/6/2004   | 6/19/2007  | 10/960160          | US | Surface Mount Heat Sink                                                                                              |
| 82187633     | To Be Filed |               |             |            |                    | US | Handling Oversubscribed Mesh Ports With Re-tagging                                                                   |
| 82187636     | Granted     | 6965718       | 2/20/2004   | 11/15/2005 | 10/7/83611         | US | Apparatus And Method For Supplying Power Over An Optical Link                                                        |
| 82187639     | Granted     | 7376089       | 3/29/2004   | 5/20/2008  | 10/812261          | US | Multiple-instance Meshing                                                                                            |
| 82187642     | Granted     | 7881307       | 4/25/2008   | 2/1/2011   | 12/150184          | US | Multiple-instance Meshing                                                                                            |
| 82187648     | Granted     | 7817157       | 8/23/2005   | 10/19/2010 | 11/209943          | US | Method And Apparatus For Capturing Slices Of Video Data                                                              |
| 82187759     | Granted     | 7885223       | 8/31/2005   | 40582      | 11/660947          | US | COMMUNICATIONS INFRASTRUCTURE FOR CONTENT DELIVERY USING EDGE SERVERS                                                |
| 82187822     | Granted     | D518827       | 7/19/2004   | 4/11/2006  | 29/209597          | US | Computer Having A Drive Carrier                                                                                      |
| 82187834     | Granted     | D517560       | 7/21/2004   | 3/21/2006  | 29/209868          | US | Computer Having A Drive Carrier                                                                                      |
| 82187849     | Granted     | 7283677       | 8/31/2004   | 10/16/2007 | 10/931647          | US | Measuring Sub-wavelength Displacements                                                                               |
| 82187903     | Granted     | 7386537       | 7/23/2004   | 6/10/2008  | 10/898128          | US | Method And System For Determining Size Of A Data Center                                                              |
| 82187972     | Granted     | 7966402       | 6/28/2005   | 6/21/2011  | 11/168129          | US | A SWITCH TO SELECTIVELY COUPLE ANY OF A PLURALITY OF VIDEO MODULES TO ANY OF A PLURALITY OF BLADES                   |
| 82188014     | Granted     | 7313575       | 6/14/2004   | 12/25/2007 | 10/868434          | US | Data Services Handler                                                                                                |
| 82188029     | Granted     | 7940911       | 4/28/2005   | 5/10/2011  | 11/119397          | US | Method And Apparatus For Providing A Specialized Resource Function In A Telephone Network                            |
| 82188077     | Granted     | 8230252       | 7/20/2004   | 7/24/2012  | 10/894784          | US | Time Of Day Response                                                                                                 |
| 82188086     | Granted     | 7890706       | 11/16/2004  | 2/15/2011  | 10/990151          | US | Delegated Write For Race Avoidance In A Processor                                                                    |
| 82188092     | Granted     | 7929421       | 10/18/2004  | 4/19/2011  | 10/967826          | US | Application Driven Router Redundancy Protocol                                                                        |
| 82188095     | Published   |               | 2/22/2005   |            | 11/064140          | US | Interpreter Engine                                                                                                   |
| 82188098     | Granted     | 7869382       | 12/6/2004   | 1/11/2011  | 11/006427          | US | Network Management Assisted Discovery                                                                                |
| 82188137     | Published   |               | 6/8/2005    |            | 11/597674          | US | Pathname Translation Method And System                                                                               |
| 82188152     | Granted     | 7607120       | 4/20/2004   | 40106      | 10/827528          | US | METHOD AND APPARATUS FOR CREATING DATA TRANSFORMATION ROUTINES FOR BINARY DATA                                       |
| 82188158     | Granted     | 7594221       | 4/20/2004   | 9/22/2009  | 10/827523          | US | Method And Apparatus For Translating Binary Code                                                                     |
| 82188266     | Granted     | 7702725       | 7/2/2004    | 4/20/2010  | 10/884092          | US | Digital Object Repositories, Models, Protocol, Apparatus, Methods And Software And Data Structures, Relating Thereto |
| 82188284     | Granted     | 7631251       | 2/16/2005   | 12/8/2009  | 11/059193          | US | Method And Apparatus For Calculating Checksums                                                                       |
| 82188347     | Granted     | 7683435       | 4/30/2004   | 3/23/2010  | 10/836145          | US | Misalignment-tolerant Multiplexing/demultiplexing Architectures                                                      |
| 82188404     | Granted     | 7420938       | 6/10/2004   | 9/2/2008   | 10/866346          | US | Finding Duplex Mismatches In Copper Based Networks                                                                   |
| 82188443     | Granted     | 8024736       | 1/28/2005   | 9/20/2011  | 11/046334          | US | System For Controlling A Distribution Of Unutilized Computer Resources                                               |
| 82188446     | Granted     | 7644161       | 1/28/2005   | 1/5/2010   | 11/046335          | US | TOPOLOGY FOR A HIERARCHY OF CONTROL PLUG-INS USED IN A CONTROL SYSTEM                                                |

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| 82188449     | Granted   | 8826287       | 1/28/2005   | 9/2/2014   | 11/046333          | US | System For Adjusting Computer Resources Allocated For Executing An Application Using A Control Plug-in                             |
| 82188452     | Granted   | 7774457       | 3/25/2005   | 8/10/2010  | 11/090714          | US | RESOURCE EVALUATION FOR A BATCH JOB AND AN INTERACTIVE SESSION CONCURRENTLY EXECUTED IN A GRID COMPUTING ENVIRONMENT               |
| 82188455     | Granted   | 7908605       | 1/28/2005   | 3/15/2011  | 11/046332          | US | Hierarchical Control System For Controlling The Allocation Of Computer Resources                                                   |
| 82188509     | Granted   | 8275951       | 38148       | 41177      | 10/865539          | US | Local Bitmaps For An Array Of Redundant Storage Devices                                                                            |
| 82188587     | Granted   | 7428550       | 8/27/2004   | 9/23/2008  | 10/928408          | US | SYSTEMS AND METHODS FOR ESTIMATING THE NUMBER OF UNIQUE ATTRIBUTES IN A DATABASE                                                   |
| 82188632     | Granted   | 7038188       | 4/29/2004   | 5/2/2006   | 10/836012          | US | Non-demolition Photon Detector That Preserves Input State Characteristics                                                          |
| 82188653     | Granted   | 7274851       | 10/18/2005  | 9/25/2007  | 11/252660          | US | Fiber Optic Module                                                                                                                 |
| 82188767     | Allowed   |               | 7/19/2006   |            | 11/490517          | US | Remote Device Access                                                                                                               |
| 82188827     | Granted   | 7644318       | 11/9/2004   | 1/5/2010   | 10/984282          | US | Method And System For A Failover Procedure With A Storage System                                                                   |
| 82188833     | Granted   | 7512705       | 12/1/2004   | 3/31/2009  | 11/000396          | US | Truncating Data Units                                                                                                              |
| 82188896     | Granted   | 7932906       | 9/15/2004   | 4/26/2011  | 10/941114          | US | CONSTRUCTING SUBSTANTIALLY EQUAL-WIDTH PIXEL BAR CHARTS TO ENABLE VISUAL DATA ANALYSIS                                             |
| 82189013     | Granted   | 7730452       | 11/1/2005   | 6/1/2010   | 11/264799          | US | Testing A Component Of A Distributed System                                                                                        |
| 82189019     | Granted   | 7577832       | 12/14/2004  | 8/18/2009  | 11/012991          | US | Apparatus And Method For Booting A System                                                                                          |
| 82189022     | Granted   | 8200955       | 6/11/2009   | 6/12/2012  | 12/482965          | US | Apparatus And Method For Booting A System                                                                                          |
| 82189025     | Granted   | 7428562       | 11/26/2004  | 9/23/2008  | 10/998208          | US | Self-authenticating Quantum Random Number Generator                                                                                |
| 82189034     | Granted   | 7607123       | 9/21/2004   | 10/20/2009 | 10/946490          | US | Systems And Methods For Validating Debug Information For Optimized Code                                                            |
| 82189076     | Granted   | 8654945       | 7/19/2006   | 2/18/2014  | 11/490493          | US | Communication System And Method                                                                                                    |
| 82189088     | Granted   | 7797727       | 1/31/2005   | 9/14/2010  | 11/047015          | US | Launching An Application In A Restricted User Account                                                                              |
| 82189193     | Granted   | 7443711       | 12/16/2004  | 10/28/2008 | 11/014554          | US | Non-volatile Programmable Impedance Nanoscale Devices                                                                              |
| 82189196     | Granted   | 7443711       | 11/9/2009   | 40974      | 90/009633          | US | Non-volatile Programmable Impedance Nanoscale Devices                                                                              |
| 82189205     | Granted   | 7340356       | 12/13/2004  | 3/4/2008   | 11/010597          | US | Method And System For Reading The Resistance State Of Junctions In Crossbar Memory                                                 |
| 82189256     | Granted   | 7308605       | 7/20/2004   | 39427      | 10/894825          | US | Latent Error Detection                                                                                                             |
| 82189265     | Granted   | 7469268       | 8/3/2004    | 12/23/2008 | 10/910679          | US | Managing Data Received From Processes Of A Distributed Computing Arrangement                                                       |
| 82189274     | Granted   | 8060599       | 3/16/2004   | 11/15/2011 | 10/801793          | US | System And Method For Determining A Streaming Media Server Configuration For Supporting Expected Workload In Compliance With, Etc. |
| 82189385     | Published |               | 1/28/2005   |            | 11/046476          | US | Thermal And Power Management Apparatus                                                                                             |
| 82189400     | Granted   | 7752623       | 9/16/2004   | 7/6/2010   | 10/942298          | US | System And Method For Allocating Resources By Examining A System Characteristic                                                    |

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|--------------|---------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------|
| 82189403     | Granted | 7712102       | 7/30/2004   | 5/4/2010   | 10/902763          | US | SYSTEM AND METHOD FOR DYNAMICALLY CONFIGURING A PLURALITY OF LOAD BALANCERS IN RESPONSE TO THE ANALYZED PERFORMANCE DATA    |
| 82189634     | Granted | 8087025       | 6/29/2005   | 12/27/2011 | 11/170219          | US | Workload Placement Among Resource-on-demand Systems                                                                         |
| 82189640     | Granted | 8104038       | 6/29/2005   | 1/24/2012  | 11/170590          | US | Matching Descriptions Of Resources With Workload Requirements                                                               |
| 82189718     | Granted | 7339490       | 6/29/2004   | 3/4/2008   | 10/880869          | US | MODULAR SENSOR ASSEMBLY                                                                                                     |
| 82189721     | Granted | 7257515       | 3/3/2004    | 8/14/2007  | 10/792557          | US | Sliding Window For Alert Generation                                                                                         |
| 82189757     | Granted | 7765531       | 10/6/2004   | 7/27/2010  | 10/960708          | US | Systems And Methods For Handling Multiple Static Queues And Modules For Distinct Environments                               |
| 82189775     | Granted | 6982877       | 2/20/2004   | 1/3/2006   | 10/783833          | US | Heat Sink Having Compliant Interface To Span Multiple Components                                                            |
| 82189781     | Granted | 6668308       | 6/8/2001    | 12/23/2003 | 09/877793          | US | Scalable Architecture Based On Single-chip Multiprocessing                                                                  |
| 82189784     | Granted | 6988170       | 10/24/2003  | 1/17/2006  | 10/693388          | US | SCALABLE ARCHITECTURE BASED ON SINGLE-CHIP MULTIPROCESSING                                                                  |
| 82189829     | Granted | 7779368       | 10/30/2004  | 8/17/2010  | 10/978171          | US | Systems And Methods For Presenting Managed Data                                                                             |
| 82189943     | Granted | 8214601       | 7/30/2004   | 7/3/2012   | 10/909057          | US | Purging Without Write-back Of Cache Lines Containing Spent Data                                                             |
| 82190006     | Granted | 7249718       | 7/20/2004   | 39294      | 10/894290          | US | Cooling System With A Variable Maximum Operation Level                                                                      |
| 82190012     | Granted | 7057509       | 6/29/2004   | 6/6/2006   | 10/881975          | US | Monitoring An Object With Identification Data And Tracking Data                                                             |
| 82190207     | Granted | 8443171       | 7/30/2004   | 5/14/2013  | 10/903155          | US | Run-time Updating Of Prediction Hint Instructions                                                                           |
| 82190270     | Granted | 7281116       | 7/30/2004   | 10/9/2007  | 10/903200          | US | Multiprocessor System Having Plural Memory Locations For Respectively Storing Tlb-shooldown Data For Plural Processor Nodes |
| 82190321     | Granted | 7332983       | 10/31/2005  | 2/19/2008  | 11/263339          | US | Tunable Delay Line                                                                                                          |
| 82190330     | Granted | 7142125       | 1/24/2005   | 11/28/2006 | 11/042910          | US | Fan Monitoring For Failure Prediction                                                                                       |
| 82190378     | Granted | 7437606       | 8/23/2004   | 10/14/2008 | 10/924513          | US | Method Of Checkpointing Parallel Processes In Execution Within Plurality Of Process Domains                                 |
| 82190393     | Granted | 7441075       | 3/17/2005   | 10/21/2008 | 11/082536          | US | DATA STORAGE METHOD AND APPARATUS EMPLOYING A TAPE CARTRIDGE FOR STORING WORM DATA                                          |
| 82190402     | Granted | 7280303       | 3/17/2005   | 10/9/2007  | 11/082614          | US | Data Storage Method And Apparatus To Detect If Worm Data Has Been Tampered With                                             |
| 82190453     | Granted | 7626778       | 10/6/2005   | 12/1/2009  | 11/245331          | US | Tape Drive Apparatus                                                                                                        |
| 82190462     | Granted | 7324297       | 9/27/2005   | 1/29/2008  | 11/236052          | US | Data Storage Apparatus And Method                                                                                           |
| 82190471     | Granted | 7778715       | 1/31/2005   | 8/17/2010  | 11/047093          | US | Methods And Systems For A Prediction Model                                                                                  |
| 82190639     | Granted | 7379255       | 1/17/2006   | 5/27/2008  | 11/332934          | US | Data Structure, Data Storage Apparatus And Method                                                                           |
| 82190645     | Granted | 7661095       | 4/14/2005   | 2/9/2010   | 11/109019          | US | System And Method To Build A Callgraph For Functions With Multiple Entry Points                                             |
| 82190657     | Granted | 7743321       | 10/28/2005  | 6/22/2010  | 11/260569          | US | METHOD AND APPARATUS FOR PROCESSING DATA                                                                                    |

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| 82190888     | Granted | 7698402       | 6/30/2004   | 4/13/2010  | 10/882597          | US | Method And Apparatus For Enhanced Design Of Multi-t      |
|              |         |               |             |            |                    |    | Systems                                                  |
| 82190891     | Granted | 9053001       | 2/24/2010   | 6/9/2015   | 12/711680          | US | Method And Apparatus For Enhanced Design Of Multi-t      |
|              |         |               |             |            |                    |    | Systems                                                  |
| 82190894     | Granted | 7499286       | 8/31/2006   | 39875      | 11/513807          | US | Mounting Adapter For Electronic Modules                  |
| 82190948     | Granted | 7702928       | 4/8/2005    | 4/20/2010  | 11/102220          | US | Memory Module With On-board Power-consumption            |
|              |         |               |             |            |                    |    | Monitoring                                               |
| 82190954     | Granted | 7523332       | 4/29/2005   | 4/21/2009  | 11/118654          | US | Interface Module With On-board Power-consumption         |
|              |         |               |             |            |                    |    | Monitoring                                               |
| 82190960     | Granted | 7613935       | 7/29/2005   | 11/3/2009  | 11/192735          | US | Power Monitoring For Processor Module                    |
| 82190966     | Granted | 7536573       | 7/29/2005   | 5/19/2009  | 11/193211          | US | Power Budgeting For Computers                            |
| 82191014     | Granted | 8578441       | 7/22/2004   | 11/5/2013  | 10/896676          | US | Enforcing Network Security Policies With Packet Labels   |
| 82191407     | Granted | 8374175       | 4/27/2005   | 2/12/2013  | 11/116008          | US | System And Method For Remote Direct Memory Access Ove    |
|              |         |               |             |            |                    |    | A Network Switch Fabric                                  |
| 82191440     | Granted | 7701602       | 2/10/2005   | 4/20/2010  | 11/053864          | US | Mobile Device-based Printing System And Method           |
| 82191446     | Granted | 8462367       | 2/10/2005   | 6/11/2013  | 11/054551          | US | Printer Voice Portal                                     |
| 82191455     | Granted | 7056204       | 1/25/2005   | 6/6/2006   | 11/042421          | US | Air Mover                                                |
| 82191503     | Granted | 8199678       | 7/25/2006   | 6/12/2012  | 11/492197          | US | Graphical Arrangement Of IT Network Components           |
| 82191587     | Granted | 7289321       | 11/16/2004  | 10/30/2007 | 10/989923          | US | VENTILATED CASING FOR AN ELECTRONIC DEVICE               |
| 82191647     | Granted | 7499923       | 3/4/2004    | 3/3/2009   | 10/791897          | US | DOCUMENT CLUSTERING METHOD AND APPARATUS BASED           |
|              |         |               |             |            |                    |    | ON COMMON INFORMATION OF DOCUMENTS                       |
| 82191752     | Granted | 7203789       | 5/10/2004   | 4/10/2007  | 10/842762          | US | Architecture And Methods For Computing With              |
|              |         |               |             |            |                    |    | Reconfigurable Resistor Crossbars                        |
| 82191767     | Granted | 7719855       | 8/31/2006   | 5/18/2010  | 11/513849          | US | Spacing Device For Modular System                        |
| 82191815     | Granted | 7647787       | 4/22/2004   | 1/19/2010  | 10/830503          | US | Upgradeable, Modular Data Center Cooling Apparatus       |
| 82191836     | Granted | 7266536       | 9/2/2004    | 9/4/2007   | 10/932386          | US | CALIBRATED CLASSIFIERS WITH THRESHOLD COMPARISONS        |
|              |         |               |             |            |                    |    |                                                          |
| 82191839     | Granted | 7134289       | 12/4/2004   | 11/14/2006 | 11/005283          | US | Multi-state Spray Cooling System                         |
| 82191881     | Granted | 7533194       | 12/13/2004  | 5/12/2009  | 11/011622          | US | MULTI-MODE PORT IN A NETWORK DEVICE FOR SERIAL AND       |
|              |         |               |             |            |                    |    | NETWORK COMMUNICATION                                    |
| 82191899     | Granted | 8335785       | 9/28/2004   | 12/18/2012 | 10/952512          | US | Ranking Results For Network Search Query                 |
| 82191944     | Granted | 7330120       | 4/29/2005   | 2/12/2008  | 11/117994          | US | Remote Measurement Of Motion Employing RFID              |
| 82192013     | Granted | 7298272       | 4/29/2005   | 11/20/2007 | 11/118021          | US | Remote Detection Employing RFID                          |
| 82192022     | Granted | 7400252       | 6/30/2005   | 7/15/2008  | 11/170921          | US | Wireless Monitoring Of Component Compatibility In An     |
|              |         |               |             |            |                    |    | Electronics System                                       |
| 82192031     | Granted | 7607014       | 6/30/2005   | 10/20/2009 | 11/171928          | US | Authenticating Maintenance Access To An Electronics Unit |
|              |         |               |             |            |                    |    | Via Wireless Communication                               |
| 82192259     | Granted | 8149846       | 11/9/2006   | 4/3/2012   | 11/558082          | US | DATA PROCESSING SYSTEM AND METHOD                        |
| 82192337     | Granted | 7694064       | 12/29/2004  | 4/6/2010   | 11/024575          | US | Multiple Cell Computer Systems And Methods               |

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| 82192397     | Granted   | 7325075       | 3/15/2004   | 1/29/2008  | 10/801468          | US | Methods For Address And Name Discovery For Ethernet Entities                                                                                |
| 82192763     | Granted   | 7658630       | 4/18/2005   | 2/9/2010   | 11/108338          | US | System And Method For Connecting Electronic Components                                                                                      |
| 82192781     | Granted   | 8812781       | 4/19/2005   | 8/19/2014  | 11/109353          | US | External State Cache For Computer Processor                                                                                                 |
| 82192832     | Granted   | 7363288       | 4/30/2004   | 4/22/2008  | 10/837410          | US | Method Of Checkpointing And Restarting Processes Which Share Open File                                                                      |
| 82192838     | Published |               | 8/5/2005    |            | 11/996588          | US | System, Method And Apparatus For Cryptography Key Management For Mobile Devices                                                             |
| 82193075     | Granted   | 7953843       | 6/14/2004   | 5/31/2011  | 10/867392          | US | System And Method For Evaluating A Heterogeneous Cluster For Supporting Expected Workload In Compliance With At Least One Service Parameter |
| 82193093     | Granted   | 7707575       | 9/20/2004   | 4/27/2010  | 10/944966          | US | SYSTEM AND METHOD FOR SELECTING A PORTFOLIO OF RESOURCES IN A HETEROGENEOUS DATA CENTER                                                     |
| 82193129     | Granted   | 7389023       | 3/15/2005   | 6/17/2008  | 11/082024          | US | Method And Apparatus For Forming A Photonic Crystal                                                                                         |
| 82193273     | Granted   | 7234060       | 7/11/2000   | 6/19/2007  | 09/614487          | US | Generation And Use Of Digital Signatures                                                                                                    |
| 82193375     | Granted   | 7512769       | 10/6/2004   | 3/31/2009  | 10/959714          | US | Process Migration                                                                                                                           |
| 82193378     | Granted   | 7031870       | 5/28/2004   | 4/18/2006  | 10/855400          | US | Data Center Evaluation Using An Air Re-circulation Index                                                                                    |
| 82193387     | Granted   | 7296135       | 10/5/2005   | 11/13/2007 | 11/243716          | US | Data Misalignment Detection And Correction In A Computer System Utilizing A Mass Storage Subsystem                                          |
| 82193402     | Granted   | 8694423       | 5/21/2004   | 4/8/2014   | 10/851619          | US | Systems And Methods For Brokering Data In A Transactional Gateway                                                                           |
| 82193405     | Granted   | 7747500       | 11/1/2004   | 6/29/2010  | 10/978895          | US | Managing And Evaluating Procurement Risk                                                                                                    |
| 82193456     | Granted   | 8175852       | 2/11/2005   | 5/8/2012   | 11/057328          | US | Method Of, And System For, Process-driven Analysis Of Operations                                                                            |
| 82193519     | Granted   | 7552434       | 4/30/2004   | 6/23/2009  | 10/837420          | US | METHOD OF PERFORMING KERNEL TASK UPON INITIAL EXECUTION OF PROCESS AT USER LEVEL                                                            |
| 82193780     | Granted   | 7284389       | 1/21/2005   | 10/23/2007 | 11/040403          | US | Two-fluid Spray Cooling System                                                                                                              |
| 82194083     | Granted   | 7382613       | 5/19/2005   | 6/3/2008   | 11/132922          | US | Computer System With External Air Mover                                                                                                     |
| 82194212     | Granted   | 7599761       | 1/19/2005   | 10/6/2009  | 11/038723          | US | Cooling Assist Module                                                                                                                       |
| 82194215     | Granted   | 8655501       | 8/13/2009   | 2/18/2014  | 12/540479          | US | Cooling Assist Module                                                                                                                       |
| 82194314     | Granted   | 7471638       | 10/8/2004   | 12/30/2008 | 10/961265          | US | Testing For A Misconnection Between First And Second Networks                                                                               |
| 82194401     | Granted   | 8260730       | 3/14/2005   | 9/4/2012   | 11/080098          | US | A Method Of, And System For, Classification Count Adjustment                                                                                |
| 82194509     | Granted   | 8845404       | 2/14/2006   | 9/30/2014  | 11/353557          | US | Ventilation Tile With Collapsible Damper                                                                                                    |
| 82194587     | Granted   | 8139507       | 9/15/2004   | 3/20/2012  | 10/941433          | US | NETWORK GRAPH FOR ALTERNATE ROUTES                                                                                                          |
| 82194692     | Granted   | 7590738       | 10/27/2004  | 9/15/2009  | 10/975278          | US | Method And System For Processing Concurrent Events In A Provisional Network                                                                 |
| 82194716     | Granted   | 7650386       | 7/29/2004   | 1/19/2010  | 10/902362          | US | Communication Among Partitioned Devices                                                                                                     |

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| 82194776     | Granted   | 7505399       | 8/13/2004   | 3/17/2009  | 10/917677          | US | Receive Load Balancing On Multiple Network Adapters                                                                                     |
| 82194818     | Granted   | 7765552       | 9/17/2004   | 7/27/2010  | 10/944227          | US | System And Method For Allocating Computing Resources                                                                                    |
| 82194962     | Granted   | 8332611       | 9/29/2005   | 12/11/2012 | 11/237865          | US | A Grid Virtual System                                                                                                                   |
| 82195013     | Granted   | 7298946       | 12/22/2004  | 11/20/2007 | 11/020582          | US | Method And System For Managing Memory                                                                                                   |
| 82195025     | Granted   | 7734474       | 4/23/2004   | 6/8/2010   | 10/830218          | US | Multi-fiber Cable For Efficient Manageability Of Optical System                                                                         |
| 82195124     | Granted   | 8713278       | 4/25/2005   | 4/29/2014  | 11/113831          | US | Display Configuration                                                                                                                   |
| 82195373     | Granted   | 7313749       | 6/29/2004   | 12/25/2007 | 10/879643          | US | SYSTEM AND METHOD FOR STRANDED FILE OPENS DURING DISK COMPRESSION UTILITY REQUESTS                                                      |
|              |           |               |             |            |                    |    | System And Method For Applying Error Correction Code(TEC) Erasure Mode And Clearing Recorded Information From A Page Deallocation Table |
| 82195382     | Granted   | 8627213       | 8/10/2004   | 1/7/2014   | 10/915939          | US | Chat Room System                                                                                                                        |
| 82195691     | Granted   | 7652589       | 2/4/2005    | 40204      | 11/051697          | US | Selecting A Function Of Components Based On Orientation                                                                                 |
| 82195712     | Granted   | 7496106       | 7/12/2005   | 2/24/2009  | 11/181011          | US | Methods And Apparatus For Providing Signalling Gateways With Multi-network Support                                                      |
| 82195832     | Granted   | 7895854       | 6/1/2005    | 3/1/2011   | 11/142558          | US | Refrigeration System With Parallel Evaporators And Variable Speed Compressor                                                            |
| 82195835     | Granted   | 7315448       | 6/1/2005    | 1/1/2008   | 11/142557          | US | Air-cooled Heat Generating Device Airflow Control System                                                                                |
| 82195838     | Granted   | 7350132       | 4/26/2005   | 3/25/2008  | 11/115887          | US | Nanoscale Interconnection Interface                                                                                                     |
| 82195961     | Granted   | 8040903       | 2/1/2005    | 10/18/2011 | 11/048522          | US | Automated Configuration Of Point-to-point Load Balancing Between Teamed Network Resources Of Peer Devices                               |
| 82196078     | Granted   | 7307437       | 3/24/2005   | 12/11/2007 | 11/089379          | US | Arrangement With Conductive Pad Embedment                                                                                               |
| 82196147     | Granted   | 7262495       | 10/7/2004   | 8/28/2007  | 10/960827          | US | 3D Interconnect With Protruding Contacts                                                                                                |
| 82196204     | Published |               | 2/24/2005   |            | 11/065690          | US | Data Retention System With A Plurality Of Access Protocols                                                                              |
| 82196318     | Granted   | 7444450       | 4/28/2005   | 10/28/2008 | 11/117962          | US | Method And System For Detecting Excessive Interrupt Processing For A Processor                                                          |
| 82196321     | Granted   | 7383471       | 12/28/2004  | 6/3/2008   | 11/023895          | US | Diagnostic Memory Dumping                                                                                                               |
| 82196375     | Granted   | 7493620       | 6/18/2004   | 2/17/2009  | 10/871951          | US | Transfer Of Waiting Interrupts                                                                                                          |
| 82196399     | Granted   | 9137113       | 1/20/2006   | 9/15/2015  | 11/335877          | US | System And Method For Dynamically Allocating Resources                                                                                  |
| 82196402     | Granted   | 7689391       | 5/20/2005   | 3/30/2010  | 11/133887          | US | Data Structure Relating A Device Characteristic To A Device Position In A Support Structure                                             |
| 82196435     | Granted   | 8826288       | 4/19/2005   | 9/2/2014   | 11/109352          | US | Computing With Both Lock-step And Free Step Processor Modes                                                                             |
| 82196630     | Granted   | 7386688       | 7/29/2004   | 6/10/2008  | 10/902340          | US | Communication Among Partitioned Devices                                                                                                 |
| 82196699     | Granted   | 8930684       | 10/26/2005  | 1/6/2015   | 11/259843          | US | Adding a runtime service for firmware-based images for a device not known to an operating system                                        |
| 82196708     | Granted   | 8230204       | 6/23/2005   | 7/24/2012  | 11/159649          | US | Migration Of System Images                                                                                                              |

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| 82196951     | Granted   | 7590885       | 4/26/2005   | 9/15/2009  | 11/114319          | US | Method And System Of Copying Memory From A Source Processor To A Target Processor By Duplicating Memory Writes |
| 82196960     | Granted   | 7933966       | 4/26/2005   | 4/26/2011  | 11/114318          | US | Method And System Of Copying A Memory Area Between Processor Elements For Lock-step Execution                  |
| 82197074     | Granted   | 7908254       | 6/10/2005   | 3/15/2011  | 11/149509          | US | Identifying Characteristics In Sets Of Organized Items                                                         |
| 82197077     | Granted   | 7315428       | 10/28/2004  | 1/1/2008   | 10/975518          | US | MAGNETIC MEDIA WRITE SIGNAL FILTER                                                                             |
| 82197125     | Granted   | 9063898       | 11/23/2004  | 6/23/2015  | 10/997020          | US | Method Of Restoring Backup Data                                                                                |
| 82197128     | Granted   | 8335770       | 2/3/2005    | 12/18/2012 | 11/051200          | US | Method Of Restoring Data                                                                                       |
| 82197131     | Granted   | 7827361       | 10/21/2004  | 11/2/2010  | 10/970888          | US | Method Of Controlling Access To Computing Resource Within Shared Computing Environment                         |
| 82197248     | Granted   | 7467145       | 4/15/2005   | 12/16/2008 | 11/107285          | US | System And Method For Analyzing Processes                                                                      |
| 82197251     | Granted   | 7827499       | 10/29/2004  | 11/2/2010  | 10/977463          | US | HIERARCHICAL DATASET DASHBOARD VIEW                                                                            |
| 82197254     | Granted   | 7694305       | 10/21/2004  | 4/6/2010   | 10/972232          | US | Method Of Controlling Access To Computing Resource Within Shared Computing Environment                         |
| 82197314     | Granted   | 7480836       | 4/25/2005   | 1/20/2009  | 11/113661          | US | Monitoring Error-handler Vector In Architected Memory                                                          |
| 82197320     | Granted   | 8930400       | 11/22/2004  | 1/6/2015   | 10/994834          | US | A SYSTEM AND METHOD FOR DISCOVERING KNOWLEDGE COMMUNITIES                                                      |
| 82197323     | Granted   | 8781845       | 3/27/2006   | 7/15/2014  | 11/390225          | US | Service Configuration Management System And Method                                                             |
| 82197389     | Granted   | 8495266       | 12/10/2004  | 7/23/2013  | 11/009214          | US | Distributed Lock                                                                                               |
| 82197440     | Granted   | 7471623       | 11/23/2004  | 12/30/2008 | 10/998239          | US | Systems And Methods For A Unified Computer System Fabric                                                       |
| 82197746     | Granted   | 8046759       | 8/26/2005   | 10/25/2011 | 11/213614          | US | RESOURCE ALLOCATION METHOD AND SYSTEM                                                                          |
| 82197755     | Granted   | 7947485       | 6/3/2005    | 5/24/2011  | 11/144586          | US | Method And Apparatus For Molecular Analysis Using Nanoelectronic Circuits                                      |
| 82197758     | Granted   | 7620978       | 7/29/2005   | 11/17/2009 | 11/193707          | US | Securely Propagating Authentication In An Ensemble Of Devices Using Single Sign-on                             |
| 82197761     | Granted   | 7307271       | 11/5/2004   | 12/11/2007 | 10/982051          | US | Nanowire Interconnection And Nano-scale Device Applications                                                    |
| 82197773     | Granted   | 7941569       | 2/24/2005   | 5/10/2011  | 11/884874          | US | Input/output Tracing In A Protocol Offload System                                                              |
| 82197878     | Granted   | 8116764       | 5/18/2005   | 40953      | 11/131311          | US | Controlling Access To Communication Services                                                                   |
| 82197896     | Granted   | 7925841       | 9/10/2004   | 4/12/2011  | 10/939047          | US | Managing Shared Memory Usage Within A Memory Resource Group Infrastructure                                     |
| 82197935     | Granted   | 7937404       | 2/4/2005    | 5/3/2011   | 11/883231          | US | Data Processing System And Method                                                                              |
| 82197998     | Granted   | 7437334       | 12/3/2004   | 10/14/2008 | 11/004318          | US | Preparing Data For Machine Learning                                                                            |
| 82198001     | Published |               | 2/28/2005   |            | 11/067852          | US | System And Method For Scheduling Execurables                                                                   |
| 82198010     | Granted   | 7810341       | 11/14/2005  | 10/12/2010 | 11/273274          | US | Redundant Upgradeable, Modular Data Center Cooling Apparatus                                                   |
| 82198016     | Granted   | 7398428       | 9/7/2004    | 7/8/2008   | 10/935550          | US | Diagnostic Tool With Ethernet Capability                                                                       |
| 82198019     | Granted   | 7840725       | 9/28/2004   | 11/23/2010 | 10/953207          | US | Capture Of Data In A Computer Network                                                                          |

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| 82198079     | Granted | 7539931       | 4/8/2005    | 5/26/2009  | 11/102530          | US | Storage Element For Mitigating Soft Errors In Logic                                                                                                                         |
| 82198130     | Granted | 8713550       | 3/11/2005   | 4/29/2014  | 11/885784          | US | Methods, Devices And Software Applications For Facilitating                                                                                                                 |
| 82198400     | Granted | 8812501       | 7/24/2006   | 8/19/2014  | 11/491362          | US | A Development Of A Computer Program                                                                                                                                         |
| 82198439     | Granted | 7502958       | 10/25/2004  | 3/10/2009  | 10/973076          | US | A Method Or Apparatus For Selecting A Cluster In A Group Of<br>Nodes                                                                                                        |
| 82198445     | Granted | 7308566       | 10/25/2004  | 12/11/2007 | 10/973004          | US | System And Method For Providing Firmware Recoverable<br>Lockstep Protection                                                                                                 |
| 82198448     | Granted | 7627781       | 10/25/2004  | 12/1/2009  | 10/973077          | US | System And Method For Configuring Lockstep Mode Of A<br>Processor Module                                                                                                    |
| 82198505     | Granted | 7356733       | 10/25/2004  | 4/8/2008   | 10/972888          | US | System And Method For Establishing A Spare Processor For<br>Recovering From Loss Of Lockstep In A Boot Processor                                                            |
| 82198514     | Granted | 7624302       | 10/25/2004  | 11/24/2009 | 10/972588          | US | System And Method For System Firmware Causing An<br>Operating System To Idle A Processor                                                                                    |
| 82198517     | Granted | 7366948       | 10/25/2004  | 4/29/2008  | 10/972796          | US | System And Method For Switching The Role Of Boot<br>Processor To A Spare Processor Responsive To Detection Of<br>Loss Of Lockstep In A Boot Processor                       |
| 82198562     | Granted | 7251588       | 6/22/2005   | 7/31/2007  | 11/158868          | US | System And Method For Maintaining In A Multi-processor<br>System A Spare Processor That Is In Lockstep For Use In<br>Recovering From Loss Of Lockstep For Another Processor |
| 82198568     | Granted | 8978741       | 2/17/2006   | 3/17/2015  | 11/357531          | US | System For Metric Introspection In Monitoring Sources                                                                                                                       |
| 82198889     | Granted | 8788639       | 5/13/2005   | 7/22/2014  | 11/129550          | US | Device For Reducing Temperature Variations In Plenums                                                                                                                       |
| 82198934     | Granted | 7539829       | 4/11/2006   | 5/26/2009  | 11/402762          | US | Method And Apparatus For Centrally Configuring Network<br>Devices                                                                                                           |
| 82199267     | Granted | 8032114       | 1/7/2005    | 10/4/2011  | 11/033355          | US | Methods And Apparatuses For Controlling Access To At Least<br>One Storage Device In A Tape Library                                                                          |
| 82199306     | Granted | 7877740       | 6/13/2005   | 1/25/2011  | 11/152466          | US | Service Access Request Authorization                                                                                                                                        |
| 82199318     | Granted | 7634773       | 11/24/2004  | 12/15/2009 | 10/997571          | US | Handling Caught Exceptions                                                                                                                                                  |
| 82199321     | Granted | 7822982       | 6/16/2005   | 10/26/2010 | 11/154798          | US | Method And Apparatus For Thread Scheduling On Multiple<br>Processors                                                                                                        |
| 82199330     | Granted | 8140878       | 1/27/2005   | 3/20/2012  | 11/045965          | US | Method And Apparatus For Automatic And Secure<br>Distribution Of A Symmetric Key Security Credential In A<br>Utility Computing Environment                                  |
| 82199369     | Granted | 7581242       | 4/30/2005   | 8/25/2009  | 11/117797          | US | Power Conservation Technique For Blade Computer Systems                                                                                                                     |
| 82199375     | Granted | 7797505       | 4/25/2005   | 9/14/2010  | 11/113461          | US | Authenticating Products                                                                                                                                                     |
| 82199510     | Granted | 7307902       | 8/30/2005   | 12/11/2007 | 11/214697          | US | Program Stack Handling                                                                                                                                                      |
| 82199516     | Granted | 7599235       | 11/2/2007   | 10/6/2009  | 11/982532          | US | Memory Correction System And Method                                                                                                                                         |
| 82199621     | Granted | 7894455       | 3/30/2005   | 2/22/2011  | 11/093714          | US | Memory Correction System And Method                                                                                                                                         |
|              |         |               |             |            |                    |    | SYSTEMS AND METHODS FOR A SIGNALING GATEWAY FOR<br>CONNECTING NETWORKS                                                                                                      |

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| 82199645     | Granted | 8271574       | 12/22/2004  | 9/18/2012  | 11/019867          | US | Content Sharing And Collaboration                                                                                                                  |
| 82199765     | Granted | 7694107       | 8/18/2005   | 4/6/2010   | 11/207047          | US | DYNAMIC PERFORMANCE RATIO PROPORTIONATE DISTRIBUTION OF THREADS WITH                                                                               |
| 82199879     | Granted | 7406053       | 12/13/2004  | 7/29/2008  | 11/011938          | US | METHODS AND SYSTEMS FOR CONTROLLING THE NUMBER OF COMPUTATIONS INVOLVED IN COMPUTING THE ALLOCATION OF RESOURCES GIVEN RESOURCE CONSTRAINTS        |
| 82199882     | Granted | 8301938       | 3/21/2005   | 41212      | 11/085429          | US | Managing Memory Health                                                                                                                             |
| 82199885     | Granted | 7480110       | 4/13/2005   | 1/20/2009  | 11/106246          | US | Medium Dependent Write Equalization                                                                                                                |
| 82199888     | Granted | 7251090       | 4/13/2005   | 7/31/2007  | 11/106177          | US | Pattern Dependent Write Equalization                                                                                                               |
| 82200005     | Granted | 7380723       | 11/1/2005   | 6/3/2008   | 11/264200          | US | Monitoring Object Movement                                                                                                                         |
| 82200008     | Granted | 8001353       | 6/10/2005   | 8/16/2011  | 11/150664          | US | Apparatus And Method For Configuring Memory Blocks                                                                                                 |
| 82200068     | Granted | 7242215       | 10/27/2004  | 7/10/2007  | 10/974660          | US | Nanoscale Latches And Impedance-encoded Logic For Use In Nanoscale State Machines, Nanoscale Pipelines, And In Other Nanoscale Electronic Circuits |
| 82200125     | Granted | 8054829       | 7/24/2006   | 11/8/2011  | 11/491801          | US | Communication System And Method                                                                                                                    |
| 82200386     | Granted | 7530064       | 9/21/2004   | 5/5/2009   | 10/945613          | US | Method And Apparatus For Automated Registry Clean-up                                                                                               |
| 82200560     | Granted | 7969994       | 7/29/2005   | 6/28/2011  | 11/192534          | US | Method And Apparatus For Multiple Connections To Group Of Switches                                                                                 |
| 82200563     | Granted | 7768932       | 4/13/2005   | 8/3/2010   | 11/105042          | US | Method For Analyzing A System In A Network                                                                                                         |
| 82200566     | Granted | 8306023       | 12/20/2004  | 11/6/2012  | 11/018061          | US | Smuggling And Recovery Of Non-packet Information                                                                                                   |
| 82200704     | Granted | 8666957       | 7/26/2006   | 3/4/2014   | 11/493238          | US | A Method Or Apparatus For Locking Shared Data                                                                                                      |
| 82200929     | Granted | 7313924       | 10/8/2004   | 1/1/2008   | 10/960573          | US | Correlation Of Vent Tiles And Racks                                                                                                                |
| 82200932     | Granted | 8208477       | 8/24/2005   | 6/26/2012  | 11/210443          | US | Data-dependent Overlay Network                                                                                                                     |
| 82201010     | Granted | 7544591       | 1/18/2007   | 6/9/2009   | 11/624682          | US | METHOD OF CREATING ISOLATED ELECTRODES IN A NANOWIRE-BASED DEVICE                                                                                  |
| 82201142     | Granted | 7730731       | 11/1/2005   | 6/8/2010   | 11/264773          | US | REFRIGERATION SYSTEM WITH SERIAL EVAPORATORS                                                                                                       |
| 82201253     | Granted | 8836717       | 10/27/2005  | 9/16/2014  | 11/260967          | US | System, Method And Utility To Format Images Retrieved From A Device                                                                                |
| 82201331     | Granted | 8015564       | 4/27/2005   | 9/6/2011   | 11/116687          | US | Method Of Dispatching Tasks In Multi-processor Computing Environment                                                                               |
| 82201385     | Granted | 7342786       | 10/25/2005  | 3/11/2008  | 11/258849          | US | Air Duct With Airtight Seal                                                                                                                        |
| 82201439     | Granted | 8892582       | 3/3/2005    | 11/18/2014 | 11/885409          | US | METHOD AND SYSTEM FOR IDENTIFYING OBJECTS OF SERVICE                                                                                               |
| 82201448     | Granted | 8074057       | 3/8/2005    | 12/6/2011  | 11/074451          | US | Systems And Methods For Controlling Instruction Throughput                                                                                         |
| 82201619     | Granted | 8782186       | 7/31/2006   | 7/15/2014  | 11/496144          | US | Systems And Methods For Addressing Managed Elements                                                                                                |
| 82201745     | Granted | 7710898       | 1/31/2005   | 5/4/2010   | 11/048253          | US | METHOD AND APPARATUS FOR AUTOMATIC VERIFICATION OF A ZONE CONFIGURATION OF A PLURALITY OF NETWORK SWITCHES                                         |

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| 82201751     | Granted   | 7567438       | 6/14/2005   | 7/28/2009  | 11/151763 US       | US | Heat Sink With Precompressed Bias Member                                                                                       |
| 82201817     | Published |               | 11/5/2004   |            | 10/981654 US       | US | Event Bookmarking                                                                                                              |
| 82201877     | Granted   | 7308163       | 5/10/2005   | 12/11/2007 | 11/125135 US       | US | Photonics Crystal System And Method Of Controlling/detecting Direction Of Radiation Propagation Using Photonics Crystal System |
| 82201886     | Granted   | 7741638       | 11/23/2005  | 6/22/2010  | 11/287113 US       | US | Control Layer For A Nanoscale Electronic Switching Device                                                                      |
| 82201931     | Granted   | 7609089       | 6/4/2008    | 10/27/2009 | 12/156877 US       | US | FPGA ARCHITECTURE AT CONVENTIONAL AND SUBMICRON SCALES                                                                         |
| 82201934     | Granted   | 7545999       | 11/1/2005   | 6/9/2009   | 11/264206 US       | US | Photonics Configuration                                                                                                        |
| 82201952     | Granted   | 7289690       | 4/15/2005   | 10/30/2007 | 11/107098 US       | US | Photonics Crystal Device For Fluid Sensing                                                                                     |
| 82202000     | Granted   | 7624313       | 3/28/2005   | 11/24/2009 | 11/092028 US       | US | TCAM BIST With Redundancy                                                                                                      |
| 82202003     | Granted   | 8046642       | 9/29/2009   | 10/25/2011 | 12/569397 US       | US | TCAM BIST With Redundancy                                                                                                      |
| 82202012     | Granted   | 7657787       | 4/11/2006   | 2/2/2010   | 11/401615 US       | US | Method Of Restoring Communication State Of Process                                                                             |
| 82202078     | Granted   | 7266744       | 12/14/2004  | 9/4/2007   | 11/011232 US       | US | Application Specific Integrated Circuit With Internal Testing                                                                  |
| 82202198     | Granted   | 7373553       | 11/8/2004   | 5/13/2008  | 10/984720 US       | US | Computer Support Network With Customer Portal To Monitor Incident-handling Status By Vendor's Computer Service System          |
| 82202240     | Granted   | 9003168       | 2/17/2005   | 4/7/2015   | 11/061696 US       | US | Conjoined-core Chip Multiprocessor Shared Resource System                                                                      |
| 82202372     | Granted   | 7350010       | 10/28/2005  | 3/25/2008  | 11/261374 US       | US | METHOD AND AN APPARATUS FOR SWITCHING ROOT CELLS FOR A COMPUTER SYSTEM WITHOUT REQUIRING THE COMPUTER SYSTEM TO BE RE-BOOTED   |
| 82202387     | Granted   | 7558649       | 5/3/2006    | 7/7/2009   | 11/416763 US       | US | Method For Predicting Airflow Rates                                                                                            |
| 82202498     | Granted   | 7831635       | 8/26/2005   | 11/9/2010  | 11/212960 US       | US | Collecting Information At A Remote Site                                                                                        |
| 82202615     | Granted   | 8631391       | 1/24/2005   | 1/14/2014  | 11/041653 US       | US | A Method And A System For Process Discovery                                                                                    |
| 82202618     | Granted   | 7797184       | 10/6/2004   | 9/14/2010  | 10/959861 US       | US | Methods And Systems For Cumulative Attribute Forecasting Using A PDF Of A Current-to-future Value Ratio                        |
| 82202630     | Granted   | 7529790       | 1/27/2005   | 5/5/2009   | 11/045558 US       | US | SYSTEM AND METHOD OF DATA ANALYSIS                                                                                             |
| 82202636     | Published |               | 3/18/2005   |            | 11/083576 US       | US | Method And Apparatus For Product Management                                                                                    |
| 82202639     | Granted   | 8209201       | 12/8/2005   | 6/26/2012  | 11/297520 US       | US | System And Method For Correlating Configurations                                                                               |
| 82202642     | Granted   | 8533016       | 1/30/2005   | 9/10/2013  | 11/048301 US       | US | System And Method For Selecting A Portfolio                                                                                    |
| 82202645     | Granted   | 8180664       | 12/1/2004   | 5/15/2012  | 11/001453 US       | US | Method And Systems For Forecasting With Model-based PDF Estimates                                                              |
| 82202690     | Granted   | 7714876       | 3/10/2005   | 5/11/2010  | 11/076700 US       | US | METHOD AND SYSTEM FOR CREATING VISUALIZATIONS                                                                                  |
| 82202693     | Granted   | 7460470       | 3/18/2005   | 12/2/2008  | 11/084600 US       | US | SYSTEMS AND METHODS OF PRIORITY FAILOVER DETERMINATION                                                                         |
| 82202708     | Granted   | 7870256       | 10/12/2005  | 1/11/2011  | 11/248932 US       | US | Remote Desktop Performance Model For Assigning Resources                                                                       |
| 82202756     | Granted   | 7370157       | 5/24/2005   | 5/6/2008   | 11/135706 US       | US | Systems And Methods Of Sharing Removable Media Storage Devices In Multi-partitioned Systems                                    |

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| 82202873     | Granted   | 8223770       | 8/3/2005    | 7/17/2012  | 11/575382          | US | Network Virtualization                                                                                                        |
| 82202894     | Granted   | 8799490       | 8/26/2005   | 8/5/2014   | 11/213363          | US | Automated Application Server (AS) Permissions Provisioning                                                                    |
| 82202996     | Granted   | 7773385       | 7/27/2005   | 8/10/2010  | 11/191368          | US | COMPUTER SERVER RECEIVING A PLURALITY OF DIFFERENT POWER SUPPLY MODULES                                                       |
| 82203005     | Granted   | 8213411       | 8/26/2005   | 7/3/2012   | 11/212246          | US | Charging Database With Class Of Service (COS)                                                                                 |
| 82203017     | Granted   | 7853934       | 6/23/2005   | 40526      | 11/165004          | US | Hot-swapping A Dynamic Code Generator                                                                                         |
| 82203020     | Granted   | 7531918       | 3/30/2005   | 5/12/2009  | 11/093934          | US | Hot Insertion And Extraction Of Power Supply Module                                                                           |
| 82203080     | Granted   | 7613705       | 8/26/2005   | 11/3/2009  | 11/213361          | US | Initial Filter Criteria (IFC) Database With Class Of Service (COS)                                                            |
| 82203119     | Granted   | 8068432       | 11/12/2004  | 11/29/2011 | 10/986966          | US | Priority-based Network Fault Analysis                                                                                         |
| 82203179     | Granted   | 7827305       | 6/22/2005   | 11/2/2010  | 11/159454          | US | Determination Of A State Of Flow Through Or A Cut Of A Parameterized Network                                                  |
| 82203194     | Granted   | 7958507       | 6/16/2005   | 6/7/2011   | 11/154305          | US | JOB SCHEDULING SYSTEM AND METHOD                                                                                              |
| 82203200     | Granted   | 7653406       | 3/23/2006   | 1/26/2010  | 11/388371          | US | ENABLING A PARTICIPANT OF A COMMUNICATION SESSION TO INITIATE A COMMUNICATION ACCORDING TO ANOTHER COMMUNICATION SERVICE      |
| 82203242     | Granted   | 7380175       | 4/12/2005   | 5/27/2008  | 11/103519          | US | Supercomputing                                                                                                                |
| 82203329     | Granted   | 7783618       | 8/26/2005   | 8/24/2010  | 11/213357          | US | Application Server (AS) Database With Class Of Service (COS)                                                                  |
| 82203494     | Granted   | 8213429       | 8/3/2005    | 7/3/2012   | 11/575395          | US | Virtual Network Interface                                                                                                     |
| 82203497     | Granted   | 7307732       | 5/31/2005   | 12/11/2007 | 11/141286          | US | Photonic Crystal Interferometer                                                                                               |
| 82203680     | Granted   | 8904000       | 1/13/2006   | 12/2/2014  | 11/331946          | US | Provision Of Services Over A Common Delivery Platform Such As A Mobile Telephony Network                                      |
| 82203701     | Published |               | 8/23/2005   |            | 11/209579          | US | REMOTE COMPUTER MANAGEMENT                                                                                                    |
| 82203743     | Granted   | 7548969       | 7/27/2005   | 6/16/2009  | 11/190319          | US | COMPUTER SYSTEM POLLING WITH ADJUSTABLE INTERVALS BASED ON RULES AND SERVER STATES                                            |
| 82203764     | Allowed   |               | 4/15/2005   |            | 11/908498          | US | System And Method Of Creating And Displaying Messages                                                                         |
| 82203827     | Granted   | 7123172       | 7/29/2005   | 10/17/2006 | 11/192559          | US | Method And System For Determining An Optimal Or Near Optimal Set Of Contexts By Constructing A Multi-directional Context Tree |
| 82203830     | Granted   | 8085888       | 10/13/2006  | 12/27/2011 | 11/580453          | US | Method And System For Determining An Optimal Or Near Optimal Set Of Contexts By Constructing A Multi-directional Context Tree |
| 82203953     | Granted   | 7443063       | 10/11/2005  | 10/28/2008 | 11/247581          | US | Cooling Fan With Motor Cooler                                                                                                 |
| 82203956     | Granted   | 7976291       | 9/16/2008   | 40736      | 12/211659          | US | Motor Cooler                                                                                                                  |
| 82204070     | Granted   | 7554228       | 5/25/2005   | 6/30/2009  | 11/137073          | US | Cooling Fan With An Outer Rotor Motor                                                                                         |
| 82204133     | Granted   | 7326032       | 10/31/2005  | 2/5/2008   | 11/263131          | US | Cooling Fan With Adjustable Tip Clearance                                                                                     |
| 82204136     | Granted   | 7433935       | 4/29/2005   | 10/7/2008  | 11/118244          | US | Self-adapting Plug-in Service                                                                                                 |
| 82204262     | Granted   | 8375360       | 11/22/2006  | 2/12/2013  | 11/603646          | US | PROVISION OF SERVICES OVER A COMMON DELIVERY PLATFORM SUCH AS A MOBILE TELEPHONY NETWORK                                      |

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| 82204316     | Published |               | 4/21/2006   |            | 11/409351          | US | Automatic Isolation Of Misbehaving Processes On A Computer System                                       |
| 82204325     | Published |               | 1/27/2005   |            | 11/045230          | US | Disk Array Encryption Element                                                                           |
| 82204493     | Granted   | 7752624       | 12/21/2004  | 7/6/2010   | 11/018684          | US | System And Method For Associating Workload Management Definitions With Computing Containers             |
| 82204499     | Granted   | 7979862       | 12/21/2004  | 7/12/2011  | 11/019070          | US | System And Method For Replacing An Inoperable Master Workload Management Process                        |
| 82204508     | Granted   | 7458066       | 2/28/2005   | 11/25/2008 | 11/068659          | US | Computer System And Method For Transferring Executables Between Partitions                              |
| 82204517     | Granted   | 7895012       | 5/3/2005    | 2/22/2011  | 11/121279          | US | SYSTEMS AND METHODS FOR ORGANIZING AND STORING DATA                                                     |
| 82204562     | Granted   | 8295448       | 3/12/2007   | 10/23/2012 | 11/716991          | US | Communication System And Method                                                                         |
| 82204637     | Published |               | 10/26/2006  |            | 11/553304          | US | Network Administration Systems And Methods                                                              |
| 82204691     | Granted   | 8997102       | 6/3/2005    | 3/31/2015  | 11/144453          | US | PRIORITIZATION OF PROCESSES FOR DEACTIVATING PROCESSES TO REDUCE MEMORY PRESSURE CONDITION (AS AMENDED) |
| 82204703     | Granted   | 7831768       | 10/30/2007  | 11/9/2010  | 11/928237          | US | Method And Apparatus For Writing Data To A Disk Array                                                   |
| 82204757     | Granted   | 7710428       | 10/27/2005  | 5/4/2010   | 11/261169          | US | Method And Apparatus For Filtering The Display Of Vectors In A Vector Image                             |
| 82204805     | Granted   | 7461273       | 5/16/2005   | 12/2/2008  | 11/129988          | US | Power Distribution Among Servers                                                                        |
| 82204808     | Granted   | 8155118       | 8/19/2005   | 4/10/2012  | 11/208330          | US | Mirroring Of A Random Subset Of Network Traffic                                                         |
| 82204811     | Granted   | 8050185       | 8/24/2005   | 11/1/2011  | 11/211198          | US | Sampling Of Network Traffic Based On Cam Lookup                                                         |
| 82204871     | Granted   | 8549134       | 2/11/2005   | 10/1/2013  | 11/055593          | US | Network Event Indicator System                                                                          |
| 82204874     | Granted   | 7873795       | 3/22/2005   | 1/18/2011  | 11/085547          | US | Multi-process Support In A Shared Register                                                              |
| 82204877     | Granted   | 7376771       | 4/13/2005   | 5/20/2008  | 11/104547          | US | Generic Interface For Operating Modes Of Modules                                                        |
| 82204928     | Granted   | 7941804       | 10/31/2005  | 5/10/2011  | 11/263140          | US | ALLOCATING RESOURCES AMONG TIERED PARTITIONS OF DIFFERENT TYPES                                         |
| 82205015     | Published |               | 10/19/2005  |            | 11/665907          | US | Telecommunications                                                                                      |
| 82205120     | Granted   | 7627859       | 4/4/2005    | 40148      | 11/098301          | US | Method For Configuring Non-script Language Library Files To Be Run As Scripts                           |
| 82205201     | Granted   | 7397666       | 10/25/2006  | 7/8/2008   | 11/552963          | US | Wedge Lock                                                                                              |
| 82205264     | Granted   | 7925650       | 7/27/2006   | 40645      | 11/495847          | US | Image Management Methods, Image Management Systems, And Articles Of Manufacture                         |
| 82205369     | Granted   | 8250276       | 10/10/2007  | 8/21/2012  | 11/870151          | US | Online Deletion Of Devices                                                                              |
| 82205375     | Granted   | 8225301       | 3/16/2005   | 7/17/2012  | 11/081465          | US | Software Licensing Management                                                                           |
| 82205429     | Granted   | 7825512       | 9/12/2005   | 11/2/2010  | 11/224919          | US | Electronic Package With Compliant Electrically-conductive Ball Interconnect                             |
| 82205438     | Granted   | 9069666       | 3/15/2006   | 6/30/2015  | 11/377755          | US | Systems And Methods For Controlling Error Reporting And Resolution                                      |
| 82205489     | Granted   | 7886055       | 4/28/2005   | 2/8/2011   | 11/117197          | US | Allocating Resources In A System Having Multiple Tiers                                                  |

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| 82205564     | Granted   | 8412826       | 3/21/2005   | 4/2/2013   | 11/085377          | US | MESSAGE EXCHANGE BETWEEN SOFTWARE COMPONENTS                                                                                           |
| 82205873     | Granted   | 7596618       | 12/7/2004   | 9/29/2009  | 11/006061          | US | Splitting A Workload Of A Node                                                                                                         |
| 82205942     | Granted   | 7984241       | 7/26/2006   | 7/19/2011  | 11/492841          | US | Controlling Processor Access To Cache Memory                                                                                           |
| 82205999     | Granted   | 8392668       | 4/4/2005    | 41338      | 11/099017          | US | Distributed-state-information-based Distributed Computing Systems And Methods And Protocols For Managing Distributed State Information |
| 82206071     | Granted   | 7760742       | 3/15/2005   | 40379      | 11/081470          | US | SYSTEMS AND METHODS OF USING PSEUDO-ROUTES FOR DATA TRANSMISSIONS                                                                      |
| 82206074     | Granted   | 7516364       | 10/31/2005  | 4/7/2009   | 11/263188          | US | Method For Testing Network Devices Using Breakpointing                                                                                 |
| 82206077     | Published |               | 2/4/2005    |            | 11/051572          | US | Mesh Mirroring With Path Tags                                                                                                          |
| 82206113     | Granted   | 7624177       | 5/25/2005   | 11/24/2009 | 11/137885          | US | Syslog Message Handling                                                                                                                |
| 82206116     | Granted   | 7873608       | 5/25/2005   | 1/18/2011  | 11/138530          | US | Pattern Matching Algorithm To Determine Valid Syslog Messages                                                                          |
| 82206119     | Granted   | 7839936       | 5/5/2005    | 11/23/2010 | 11/123483          | US | Method And System For Determining A Number Of Data Packets Required To Transport A Data Block                                          |
| 82206122     | Granted   | 8799444       | 3/18/2005   | 41856      | 11/084310          | US | Automated Host Discovery And Path Tracing By Network Management Server                                                                 |
| 82206185     | Granted   | 7959419       | 6/1/2005    | 6/14/2011  | 11/143356          | US | REMOVABLE FAN FOR ELECTRONIC DEVICES                                                                                                   |
| 82206191     | Granted   | 8245109       | 3/31/2006   | 8/14/2012  | 11/394949          | US | Error Checking And Correction (ECC) System And Method                                                                                  |
| 82206194     | Granted   | 7624323       | 10/31/2006  | 11/24/2009 | 11/590047          | US | Method And Apparatus For Testing An IC Device Based On Relative Timing Of Test Signals                                                 |
| 82206200     | Granted   | 7756976       | 3/18/2005   | 7/13/2010  | 11/084440          | US | SYSTEMS AND METHODS FOR DENYING ROGUE DHCP SERVICES                                                                                    |
| 82206236     | Granted   | 8108865       | 7/13/2007   | 1/31/2012  | 11/777480          | US | ACQUIRING MUTEXES BY A FORKING THREAD (amended)                                                                                        |
| 82206248     | Granted   | 7840833       | 1/29/2008   | 11/23/2010 | 12/022067          | US | Managing A Node Cluster                                                                                                                |
| 82206254     | Granted   | 7668703       | 6/7/2005    | 2/23/2010  | 11/147096          | US | Determining Required Capacity For A Resource                                                                                           |
| 82206257     | Granted   | 7925757       | 7/25/2006   | 4/12/2011  | 11/492739          | US | Determining A Portion Of Required Capacity Attributed To Applications In Multiple Classes Of Service                                   |
| 82206266     | Granted   | 8103486       | 10/12/2006  | 1/24/2012  | 11/546632          | US | Determining Required Capacity For A Resource                                                                                           |
| 82206317     | Granted   | 7480923       | 4/28/2005   | 1/20/2009  | 11/117037          | US | Drive Bezels For Computer Storage Systems                                                                                              |
| 82206389     | Granted   | 8656269       | 3/27/2006   | 41688      | 11/389747          | US | Providing A Functionality By Loading Logic Into A Document                                                                             |
| 82206425     | Granted   | 7340620       | 5/10/2005   | 3/4/2008   | 11/126479          | US | RAPID LOAD REDUCTION FOR POWER-OVER-LAN SYSTEM USING LOWER AND HIGHER PRIORITY STATES FOR PORTS                                        |
| 82206428     | Granted   | 8151014       | 10/3/2005   | 4/3/2012   | 11/242089          | US | Raid Performance Using Command Descriptor Block Pointer Forwarding Technique                                                           |
| 82206494     | Granted   | 7673305       | 10/23/2006  | 3/2/2010   | 11/585017          | US | System And Method Of Expediting Certain Jobs In A Computer Processing System                                                           |
| 82206563     | Granted   | 8126856       | 5/26/2005   | 2/28/2012  | 11/138020          | US | File Access Management System                                                                                                          |
| 82206632     | Granted   | 7711914       | 6/28/2005   | 5/4/2010   | 11/169235          | US | Debugging Using Virtual Watchpoints                                                                                                    |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------|
| 82206701     | Granted   | 8908/08       | 10/28/2005  | 12/9/2014  | 11/262434 US       |    | A Secure Method And Apparatus For Enabling The Provisioning Of A Shared Service In A Utility Computing Environment |
| 82206740     | Granted   | 8364874       | 1/17/2006   | 1/29/2013  | 11/332956 US       |    | Prioritized Polling For Virtual Network Interfaces                                                                 |
| 82206743     | Allowed   |               | 3/30/2005   |            | 11/096577 US       |    | Database Extension Structure                                                                                       |
| 82206746     | Granted   | 8386520       | 3/30/2005   | 2/26/2013  | 11/096576 US       |    | Database Security Structure                                                                                        |
| 82206749     | Granted   | 8488472       | 2/22/2006   | 7/16/2013  | 11/359645 US       |    | Automated Cable Identification And Verification System                                                             |
| 82206758     | Granted   | 7779218       | 7/29/2005   | 8/17/2010  | 11/192806 US       |    | DATA RESYNCHRONIZATION IN A REMOTE MIRRORING APPLICATION                                                           |
| 82206860     | Granted   | 7962656       | 1/3/2006    | 6/14/2011  | 11/324518 US       |    | Command Encoding Of Data To Enable High-level Functions In Computer Networks                                       |
| 82206881     | Granted   | 7323920       | 6/13/2005   | 1/29/2008  | 11/152274 US       |    | Soft-error Rate Improvement In A Latch Using Low-pass Filtering                                                    |
| 82206989     | Granted   | 8020038       | 9/28/2006   | 9/13/2011  | 11/529145 US       |    | System And Method For Adjusting Operating Points Of A Processor Based On Detected Processor Errors                 |
| 82206992     | Granted   | 8209492       | 6/14/2005   | 41086      | 11/152305 US       |    | Systems And Methods Of Accessing Common Registers In A Multi-core Processor                                        |
| 82206998     | Granted   | 7415580       | 8/1/2005    | 8/19/2008  | 11/194372 US       |    | System For Determining The Position Of An Element In Memory                                                        |
| 82207010     | Published |               | 1/19/2006   |            | 11/795144 US       |    | TRANSACTION PROXY IN A TELECOMMUNICATIONS OR MESSAGING SYSTEM AND RELATED METHODS                                  |
| 82207067     | Granted   | 8990547       | 8/23/2005   | 3/24/2015  | 11/209555 US       |    | Systems And Methods For Re-ordering Instructions                                                                   |
| 82207073     | Granted   | 8219780       | 9/16/2005   | 7/10/2012  | 11/228058 US       |    | Mitigating Context Switch Cache Miss Penalty                                                                       |
| 82207133     | Granted   | 8346740       | 7/22/2005   | 1/1/2013   | 11/187149 US       |    | File Cache Management System                                                                                       |
| 82207304     | Granted   | 7719836       | 5/27/2009   | 5/18/2010  | 12/472764 US       |    | Cooling Fan Module                                                                                                 |
| 82207385     | Granted   | 7783140       | 6/9/2005    | 8/24/2010  | 11/148583 US       |    | Optically Coupled Integrated Circuit Layers                                                                        |
| 82207610     | Granted   | 7640760       | 3/25/2005   | 1/5/2010   | 11/089608 US       |    | Temperature Control Using A Sensor Network                                                                         |
| 82207634     | Granted   | 8051156       | 7/28/2006   | 11/1/2011  | 11/495360 US       |    | Managing Power And Performance                                                                                     |
| 82207676     | Granted   | 7536567       | 11/18/2005  | 5/19/2009  | 11/283356 US       |    | Bios-based Systems And Methods Of Processor Power Management                                                       |
| 82207685     | Granted   | 8054976       | 6/16/2006   | 11/8/2011  | 11/454624 US       |    | Quantum Key Distribution Apparatus & Method                                                                        |
| 82207817     | Granted   | 7548540       | 7/17/2006   | 6/16/2009  | 11/487313 US       |    | Dynamic Discovery Of ISO Layer-2 Topology                                                                          |
| 82207886     | Granted   | 8024737       | 4/24/2006   | 9/20/2011  | 11/410471 US       |    | Method And A System That Enables The Calculation Of Resource Requirements For A Composite Application              |
| 82207985     | Granted   | 7877803       | 6/27/2005   | 1/25/2011  | 11/167346 US       |    | Automated Immune Response For A Computer                                                                           |
| 82208054     | Granted   | 7926042       | 10/31/2005  | 4/12/2011  | 11/264651 US       |    | System And Method For Dynamic Instrumentation                                                                      |
| 82208069     | Granted   | 8126427       | 4/10/2006   | 2/28/2012  | 11/911846 US       |    | Method And Apparatus For Supplying Billing Information To A Communication Device                                   |
| 82208111     | Allowed   |               | 1/23/2006   |            | 11/337457 US       |    | Probabilistic Correlation Of System Events With Program Instructions                                               |

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| 82208249     | Granted     | 7545242       | 11/1/2005   | 6/9/2009   | 11/264410          | US | Distributing Clock Signals Using Metamaterial-based Waveguides                                                               |
| 82208312     | Granted     | 7359587       | 11/1/2005   | 4/15/2008  | 11/264210          | US | Photonic Interconnections That Include Optical Transmission Paths For Transmitting Optical Signals                           |
| 82208315     | Granted     | 7639912       | 1/31/2007   | 12/29/2009 | 11/701159          | US | Apparatus And Method For Subterranean Distribution Of Optical Signals                                                        |
| 82208387     | Granted     | 8783051       | 4/1/2008    | 7/22/2014  | 12/060804          | US | Data Processing System Storage Unit, Data Processing System                                                                  |
| 82208507     | Granted     | 7765528       | 9/24/2005   | 7/27/2010  | 11/232330          | US | Cooling Apparatus And Data Processing System                                                                                 |
| 82208510     | Granted     | 7512600       | 6/10/2005   | 39903      | 11/150803          | US | Identifying Sources Of Memory Retention                                                                                      |
| 82208555     | Granted     | 7742310       | 9/29/2006   | 6/22/2010  | 11/541084          | US | Use Of Multi-join Operator And Rules As Framework For Join Tree Processing In Database Systems                               |
| 82208570     | Granted     | 8145627       | 6/10/2005   | 3/27/2012  | 11/150388          | US | Sequencer                                                                                                                    |
| 82208609     | Granted     | 7788664       | 11/8/2005   | 8/31/2010  | 11/270113          | US | Use Of Connectivity Analysis To Assist Rule-based Optimizers                                                                 |
| 82208612     | Granted     | 8209681       | 11/8/2005   | 6/26/2012  | 11/270089          | US | METHOD OF VIRTUALIZING COUNTER IN COMPUTER SYSTEM                                                                            |
| 82208633     | Granted     | 7186150       | 10/27/2005  | 3/6/2007   | 11/261728          | US | Method Of Sampling Hardware Events In Computer System                                                                        |
| 82208687     | Granted     | 8170034       | 3/1/2005    | 5/1/2012   | 11/817611          | US | Split Key In A Press-fit Connector                                                                                           |
| 82208813     | Granted     | 7285947       | 8/31/2005   | 10/23/2007 | 11/216732          | US | Packet Forwarding System And Packet Forwarding Device                                                                        |
| 82208873     | Granted     | 7904686       | 5/13/2008   | 3/8/2011   | 12/152595          | US | Power Metering Using Current-indicative Signal                                                                               |
| 82208882     | Granted     | 7814078       | 6/20/2005   | 40463      | 11/156955          | US | Data Security For Use With A File System                                                                                     |
| 82208885     | Granted     | 8423396       | 4/28/2005   | 4/16/2013  | 11/116862          | US | Identification Of Files With Similar Content                                                                                 |
| 82208888     | Granted     | 7809781       | 4/29/2005   | 10/5/2010  | 11/118832          | US | A System And Method For Process Discovery                                                                                    |
| 82208921     | Granted     | 7593904       | 6/30/2005   | 9/22/2009  | 11/172187          | US | DETERMINING A TIME POINT CORRESPONDING TO CHANGE IN DATA VALUES BASED ON FITTING WITH RESPECT TO PLURAL AGGREGATE VALUE SETS |
| 82208927     | Granted     | 7437338       | 3/21/2006   | 10/14/2008 | 11/386005          | US | EFFECTING ACTION TO ADDRESS AN ISSUE ASSOCIATED WITH A CATEGORY BASED ON INFORMATION THAT ENABLES RANKING OF CATEGORIES      |
| 82208930     | Application |               | 2/28/2006   |            | 11/364108          | US | PROVIDING INFORMATION REGARDING A TREND BASED ON OUTPUT OF A CATEGORIZER                                                     |
| 82208933     | Granted     | 7668789       | 3/30/2006   | 2/23/2010  | 11/393487          | US | Identifying An Emerging Or New Category                                                                                      |
| 82208942     | Granted     | 8898141       | 12/9/2005   | 11/25/2014 | 11/298415          | US | Comparing Distributions Of Cases Over Groups Of Categories                                                                   |
| 82209056     | Granted     | 7756594       | 3/10/2005   | 7/13/2010  | 10/549139          | US | System And Method For Information Management                                                                                 |
| 82209242     | Granted     | 7461216       | 2/23/2006   | 12/2/2008  | 11/359501          | US | CONSISTENT INFORMATION MANAGEMENT AMONG SERVER DEVICES                                                                       |
| 82209311     | Granted     | 7806489       | 8/5/2005    | 10/5/2010  | 11/198792          | US | Memory Controller                                                                                                            |
| 82209365     | Granted     | 7816975       | 9/20/2005   | 10/19/2010 | 11/230786          | US | Latch Systems For A Drive Cage Assembly                                                                                      |
|              |             |               |             |            |                    |    | Circuit And Method For Bias Voltage Generation                                                                               |

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| 82209422     | Granted   | 7478255       | 12/13/2005  | 1/13/2009  | 11/304370          | US | Clock Distribution In Multi-cell Computing Systems                                                                                       |
| 82209449     | Granted   | 7720377       | 1/23/2006   | 5/18/2010  | 11/337328          | US | Compute Clusters Employing Photonic Interconnections For Transmitting Optical Signals Between Compute Cluster Nodes                      |
| 82209563     | Granted   | D541286       | 8/3/2005    | 4/24/2007  | 29/235645          | US | Computer Having Release Handles                                                                                                          |
| 82209566     | Granted   | 7492329       | 10/12/2006  | 39861      | 11/580338          | US | Composite Material With Chirped Resonant Cells                                                                                           |
| 82209608     | Granted   | 7466544       | 1/25/2008   | 12/16/2008 | 12/019745          | US | Latching Mechanism                                                                                                                       |
| 82209611     | Granted   | 7554815       | 5/31/2006   | 6/30/2009  | 11/445074          | US | Resilient Clip For Circuit Board                                                                                                         |
| 82209620     | Granted   | 7653833       | 10/31/2006  | 1/26/2010  | 11/590321          | US | Terminating A Non-clustered Workload In Response To A Failure Of A System With A Clustered Workload                                      |
| 82209671     | Granted   | 7819307       | 10/27/2005  | 10/26/2010 | 11/260061          | US | METHOD AND SYSTEM FOR MANAGING MONETARY VALUE ON A MOBILE DEVICE                                                                         |
| 82209740     | Granted   | 7818746       | 3/30/2005   | 10/19/2010 | 11/093453          | US | SYSTEM AND METHOD FOR BENCHMARKING USING A MULTITHREADED LOAD GENERATOR                                                                  |
| 82209743     | Granted   | D540805       | 8/3/2005    | 4/17/2007  | 29/235640          | US | Computer Having A Pull-tab                                                                                                               |
| 82209749     | Granted   | 8713667       | 7/8/2005    | 4/29/2014  | 11/177715          | US | Policy Based Cryptographic Application Programming Interface In Secure Memory                                                            |
| 82209761     | Granted   | 7602789       | 10/23/2006  | 10/13/2009 | 11/585034          | US | Low Overhead Method To Detect New Connection Rate For Network Traffic                                                                    |
| 82209869     | Granted   | 7624234       | 8/31/2006   | 11/24/2009 | 11/514549          | US | Directory Caches, And Methods For Operation Thereof                                                                                      |
| 82209878     | Granted   | D544866       | 8/3/2005    | 6/19/2007  | 29/235639          | US | Front Security Knob For A Computer Memory Module (as Amended 3/7/07 On NOA)                                                              |
| 82209881     | Granted   | 7869367       | 11/30/2005  | 1/11/2011  | 11/291200          | US | Methods And Systems For Checking Expected Network Traffic                                                                                |
| 82209884     | Granted   | D540329       | 8/3/2005    | 4/10/2007  | 29/235637          | US | Computer Device Having A Front Bezel For A Memory Module Receptacle                                                                      |
| 82209887     | Granted   | D541285       | 8/3/2005    | 4/24/2007  | 29/235642          | US | Computer Processor Module Having A Front Release Mechanism                                                                               |
| 82209998     | Granted   | 8949404       | 5/24/2005   | 2/3/2015   | 11/135761          | US | Acquiring Graphical Operating System Post-failure Screen                                                                                 |
| 82210004     | Granted   | 8000462       | 8/12/2005   | 8/16/2011  | 11/203362          | US | Screening Of Calls In A Packet-based Network                                                                                             |
| 82210196     | Granted   | 8458336       | 4/25/2006   | 6/4/2013   | 11/411997          | US | STATE MACHINE EVENT RESTORATION (As Amended)                                                                                             |
| 82210232     | Granted   | 7636643       | 6/29/2006   | 12/22/2009 | 11/480033          | US | GAUGE HAVING A DYNAMICALLY UPDATED INDICIA OF A VALUE'S NORMAL RANGE, AND METHODS AND MEANS TO FACILITATE THE DISPLAY AND UPDATE OF SAME |
| 82210235     | Granted   | 7640503       | 10/31/2006  | 12/29/2009 | 11/590162          | US | Graphic Representation Of Computer Reconfigurations                                                                                      |
| 82210499     | Granted   | 7859997       | 5/26/2005   | 12/28/2010 | 11/139168          | US | Packet Handling On A Network Device                                                                                                      |
| 82210511     | Granted   | 7594090       | 7/18/2005   | 40078      | 11/184295          | US | Efficient Data Storage                                                                                                                   |
| 82210574     | Granted   | 7650471       | 1/6/2006    | 1/19/2010  | 11/326919          | US | Head Of Queue Cache For Communication Interfaces                                                                                         |
| 82210622     | Published |               | 11/22/2005  |            | 11/285849          | US | Method And Apparatus For Monitoring Software Usage                                                                                       |

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| 82210694     | Granted   | 8914665       | 7/6/2006    | 12/16/2014 | 11/480917          | US | READING OR STORING BOOT DATA IN AUXILIARY MEMORY OF A TAPE CARTRIDGE                                                                      |
| 82210865     | Granted   | 7966608       | 7/26/2006   | 6/21/2011  | 11/493426          | US | METHOD AND APPARATUS FOR PROVIDING A COMPLETE INTERFACE                                                                                   |
| 82210868     | Granted   | 8595612       | 10/26/2006  | 11/26/2013 | 11/586872          | US | Display Of Web Page With Available Data                                                                                                   |
| 82210871     | Granted   | 7251092       | 7/25/2005   | 7/31/2007  | 11/188558          | US | Data Transfer Apparatus And Method For Transferring Data                                                                                  |
| 82210874     | Granted   | 8484583       | 10/26/2005  | 7/9/2013   | 11/259215          | US | Operator Control Panel Having A Replaceable Default Screen                                                                                |
| 82210880     | Granted   | 7756676       | 11/14/2005  | 7/13/2010  | 11/273696          | US | Detecting Data Change Based On Adjusted Data Values                                                                                       |
| 82210931     | Granted   | 7917712       | 9/30/2005   | 3/29/2011  | 11/240120          | US | Method And System For Governing Access To Storage Devices On San                                                                          |
| 82210937     | Granted   | 8214638       | 9/26/2006   | 7/3/2012   | 11/535470          | US | Using Multiple Certificates To Distribute Public Keys                                                                                     |
| 82210943     | Granted   | 8516226       | 1/23/2006   | 8/20/2013  | 11/337425          | US | EXECUTING A PREFETCHING POLICY RESPONSIVE TO ENTRY INTO AN EXECUTION PHASE OF AN APPLICATION (as amended)                                 |
| 82211060     | Published |               | 10/25/2005  |            | 12/091172          | US | Memory Access Control                                                                                                                     |
| 82211072     | Granted   | 8103861       | 2/3/2006    | 1/24/2012  | 11/346736          | US | Method And System Of Presenting An Interrupt Request To Processors Executing In Lock Step                                                 |
| 82211177     | Granted   | 8880489       | 8/4/2005    | 11/4/2014  | 11/198806          | US | Discovery Across Multiple Registries                                                                                                      |
| 82211180     | Granted   | 7227379       | 7/27/2005   | 6/5/2007   | 11/192197          | US | Nanoscale Latch-array Processing Engines                                                                                                  |
| 82211183     | Granted   | 7783509       | 3/10/2006   | 8/24/2010  | 11/373592          | US | DETERMINING THAT A CHANGE HAS OCCURRED IN RESPONSE TO DETECTING A BURST OF ACTIVITY                                                       |
| 82211186     | Granted   | 7519857       | 6/16/2006   | 4/14/2009  | 11/424551          | US | METHOD, APPARATUS, AND SYSTEM FOR A SOFTWARE BASED BUSINESS CONTINUITY SOLUTION FOR A COMPUTING ENVIRONMENT                               |
| 82211252     | Granted   | 7891464       | 6/15/2006   | 2/22/2011  | 11/453694          | US | System And Method For Noise Suppression                                                                                                   |
| 82211294     | Granted   | 8392927       | 5/19/2005   | 3/5/2013   | 11/134681          | US | System And Method For Determining A Partition Of A Consumer's Resource Access Demands Between A Plurality Of Different Classes Of Service |
| 82211300     | Granted   | 7849327       | 1/19/2005   | 12/7/2010  | 11/040261          | US | A TECHNIQUE TO VIRTUALIZE PROCESSOR INPUT/OUTPUT RESOURCES                                                                                |
| 82211303     | Granted   | 8214830       | 1/19/2005   | 7/3/2012   | 11/041061          | US | IMPROVING PERFORMANCE IN A VIRTUALIZATION ARCHITECTURE WITH A PROCESSOR ABSTRACTION LAYER                                                 |
| 82211315     | Granted   | 7624425       | 10/28/2005  | 11/24/2009 | 11/262431          | US | Method And Apparatus For Generating A Security Document For A Farm In A Utility Computing Environment                                     |
| 82211378     | Granted   | 8688821       | 10/26/2005  | 4/1/2014   | 11/259224          | US | Automatic Transmission Of Support Information From Storage Apparatus                                                                      |
| 82211492     | Granted   | 7532119       | 11/8/2005   | 5/12/2009  | 11/269237          | US | Multi-tiered Network For Gathering Detected Condition Information                                                                         |



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| 82211567     | Granted   | 7561439       | 10/28/2005  | 7/14/2009  | 11/261055          | US | Mounting Slot Connector On Mezzanine Board In Electronic System                                             |
| 82211675     | Granted   | 8386702       | 10/27/2005  | 2/26/2013  | 11/261270          | US | Memory Controller                                                                                           |
| 82211759     | Granted   | D601010       | 3/20/2006   | 9/29/2009  | 29/256413          | US | Claimsheel Package                                                                                          |
| 82211795     | Granted   | 7894434       | 7/3/2006    | 2/22/2011  | 11/428410          | US | METHOD, APPARATUS, AND SYSTEM FOR CAPTURING TRAFFIC STATISTICS BETWEEN TWO SITES OF MPLS BASED VPN          |
| 82211804     | Granted   | 8205146       | 7/21/2005   | 6/19/2012  | 11/186372          | US | Persistent Error Detection In Digital Memory                                                                |
| 82211867     | Published |               | 10/28/2005  |            | 11/262097          | US | Telephony And Web Services Coordination                                                                     |
| 82211921     | Granted   | 7913308       | 10/31/2005  | 3/22/2011  | 11/263680          | US | Secure Remote Referencing Of A Networked Object Of Service                                                  |
| 82211933     | Granted   | 7327571       | 9/6/2005    | 39483      | 11/220049          | US | Thermal Load Balancing Systems And Methods                                                                  |
| 82212002     | Granted   | 8773436       | 9/27/2006   | 7/8/2014   | 11/527867          | US | Pixel Charts With Data Dependent Display Spaces                                                             |
| 82212008     | Granted   | 7761458       | 2/1/2006    | 7/20/2010  | 11/345834          | US | Segmentation Of A Data Sequence                                                                             |
| 82212068     | Granted   | 8248956       | 10/31/2005  | 8/21/2012  | 12/092101          | US | METHOD OR APPARATUS FOR DISTRIBUTING ROUTING INFORMATION IN NETWORKS                                        |
| 82212071     | Granted   | 7433763       | 4/20/2006   | 10/7/2008  | 11/407611          | US | Power Management Logic That Reconfigures A Load When A Power Supply Fails                                   |
| 82212251     | Granted   | 7623533       | 10/14/2005  | 11/24/2009 | 11/250663          | US | Switch Meshing Using Multiple Directional Spanning Trees                                                    |
| 82212305     | Granted   | 7218996       | 6/26/2006   | 5/15/2007  | 11/474765          | US | Method For Thermally Managing A Room                                                                        |
| 82212320     | Granted   | 7715251       | 10/25/2006  | 5/11/2010  | 11/586057          | US | Memory Access Strobe Configuration System And Process                                                       |
| 82212419     | Granted   | 7652575       | 10/27/2005  | 1/26/2010  | 11/262221          | US | MONITORING OF PACKAGES                                                                                      |
| 82212440     | Granted   | 7971131       | 6/24/2005   | 6/28/2011  | 11/166895          | US | System And Method For Iterative Denoising And Error Correction Decoding                                     |
| 82212485     | Granted   | 7159082       | 10/3/2005   | 39084      | 11/242708          | US | System And Method For Throttling Memory Accesses                                                            |
| 82212491     | Granted   | 7539881       | 4/15/2006   | 5/26/2009  | 11/404455          | US | SYSTEM AND METHOD FOR DYNAMICALLY ADJUSTING POWER CAPS FOR ELECTRONIC COMPONENTS BASED ON POWER CONSUMPTION |
| 82212497     | Published |               | 9/15/2005   |            | 11/227763          | US | Traffic Anomaly Analysis For The Detection Of Aberrant Network Code                                         |
| 82212551     | Granted   | 7502971       | 10/12/2005  | 3/10/2009  | 11/248692          | US | Determining A Recurrent Problem Of A Computer Resource Using Signatures                                     |
| 82212611     | Granted   | 9143524       | 7/26/2006   | 9/22/2015  | 11/494289          | US | PROPAGATION OF MALICIOUS CODE THROUGH AN INFORMATION TECHNOLOGY NETWORK                                     |
| 82212614     | Granted   | 7581125       | 9/22/2005   | 8/25/2009  | 11/232525          | US | Agent For Managing Power Among Electronic Systems                                                           |
| 82212617     | Granted   | 7362766       | 6/24/2005   | 4/22/2008  | 11/166326          | US | System And Method For Dynamically Controlling Weights Assigned To Consumers Competing For A Shared Resource |
| 82212620     | Granted   | 8612028       | 6/10/2005   | 12/17/2013 | 11/149991          | US | System And Method For Determining Correct Sign Of Response Of An Adaptive Controller                        |

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| 82212623     | Granted   | 7761875       | 6/10/2005   | 7/20/2010  | 11/151159          | US | WEIGHTED PROPORTIONAL-SHARE SCHEDULER THAT MAINTAINS FAIRNESS IN ALLOCATING SHARES OF A RESOURCE TO COMPETING CONSUMERS WHEN WEIGHT IS ASSIGNED TO THE CONSUMERS CHANGE |
| 82212680     | Published |               | 4/27/2007   |            | 11/796170          | US | CREATING A DATA STRUCTURE THAT SPECIFIES RELATIONSHIPS BETWEEN NETWORKED OBJECTS                                                                                        |
| 82212854     | Granted   | 8862841       | 4/25/2006   | 10/14/2014 | 11/411385          | US | Method And System For Scalable, Distributed, Differential Electronic-data Backup And Archiving                                                                          |
| 82212875     | Granted   | 8688890       | 12/5/2006   | 4/1/2014   | 11/635316          | US | Bit Ordering For Communicating An Address On A Serial Fabric                                                                                                            |
| 82212881     | Granted   | 8874806       | 7/26/2006   | 10/28/2014 | 11/492830          | US | METHODS AND APPARATUS FOR MANAGING MULTIPATHING SOFTWARE                                                                                                                |
| 82212992     | Granted   | 7694193       | 3/13/2007   | 4/6/2010   | 11/685395          | US | SYSTEMS AND METHODS FOR IMPLEMENTING A STRIDE VALUE FOR ACCESSING MEMORY                                                                                                |
| 82212995     | Granted   | 7844868       | 1/27/2010   | 11/30/2010 | 12/694718          | US | SYSTEM AND METHOD FOR IMPLEMENTING A STRIDE VALUE FOR MEMORY TESTING                                                                                                    |
| 82212998     | Granted   | 8744987       | 4/19/2006   | 6/3/2014   | 11/406689          | US | Count Estimation Via Machine Learning                                                                                                                                   |
| 82213166     | Granted   | 7610468       | 10/26/2006  | 10/27/2009 | 11/553444          | US | Modified Buddy System Memory Allocation                                                                                                                                 |
| 82213184     | Granted   | 7966556       | 3/13/2007   | 6/21/2011  | 11/717153          | US | METHOD OF COUPLING A SWITCHED CIRCUIT NETWORK TO AN INTERNET PROTOCOL NETWORK                                                                                           |
| 82213310     | Granted   | 7467333       | 9/1/2005    | 39798      | 11/218235          | US | System And Method For Interposition-based Selective Simulation Of Faults For Access Requests To A Data Storage System                                                   |
| 82213355     | Granted   | 7406222       | 2/16/2006   | 7/29/2008  | 11/357587          | US | Composite Evanescent Waveguides And Associated Methods                                                                                                                  |
| 82213361     | Granted   | 7499611       | 6/26/2008   | 3/3/2009   | 12/147335          | US | Composite Evanescent Waveguides And Associated Methods                                                                                                                  |
| 82213625     | Granted   | 8218566       | 10/7/2005   | 7/10/2012  | 11/245667          | US | Systems And Methods For Making Serial Ports Of Existing Computers Available Over A Network                                                                              |
| 82213670     | Granted   | 7489583       | 9/6/2005    | 2/10/2009  | 11/221036          | US | Constant-weight-code-based Addressing Of Nanoscale And Mixed Microscale/nanoscale Arrays                                                                                |
| 82213685     | Granted   | 7912998       | 1/6/2006    | 3/22/2011  | 11/326918          | US | DMA Access Systems And Methods                                                                                                                                          |
| 82213811     | Granted   | 7774636       | 10/17/2007  | 8/10/2010  | 11/873736          | US | A METHOD AND SYSTEM FOR KERNEL PANIC RECOVERY                                                                                                                           |
| 82213817     | Published |               | 7/26/2006   |            | 11/493006          | US | A METHOD OF RETRIEVING DATA FROM A DATA REPOSITORY, AND SOFTWARE AND APPARATUS RELATING THERETO                                                                         |
| 82213856     | Granted   | 7543128       | 7/25/2006   | 6/2/2009   | 11/493389          | US | Method And Apparatus For Repurposing Compute Resources To Implement, Or Not Implement, Storage Access Protocols                                                         |
| 82213859     | Granted   | 8051162       | 7/28/2006   | 11/1/2011  | 11/495365          | US | Data Assurance In Server Consolidation                                                                                                                                  |

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| 82213883     | Granted     | 7840765       | 10/31/2006  | 11/23/2010 | 11/591057 US       |    | RDMA COPY-ON-WRITE                                                                                                                 |
| 82213925     | Granted     | 9032127       | 9/14/2006   | 5/12/2015  | 11/520910 US       |    | Method Of Balancing I/O Device Interrupt Service Loading In A Computer System                                                      |
| 82213982     | Granted     | 8255516       | 4/28/2006   | 8/28/2012  | 11/413349 US       |    | Performance-data Based Server Consolidation                                                                                        |
| 82214066     | Granted     | 7761081       | 12/19/2005  | 7/20/2010  | 11/311854 US       |    | Service Provisioning                                                                                                               |
| 82214105     | Granted     | 8104041       | 4/24/2006   | 40932      | 11/409853 US       |    | Computer Workload Redistribution                                                                                                   |
| 82214129     | Granted     | 8743432       | 10/5/2005   | 6/3/2014   | 11/244092 US       |    | USB Device With Pictbridge Capability                                                                                              |
| 82214168     | Granted     | 7260666       | 7/26/2005   | 8/21/2007  | 11/189572 US       |    | Supporting Multiple Methods For Device Hotplug In A Single Computer                                                                |
| 82214174     | Granted     | 8606894       | 4/27/2006   | 12/10/2013 | 11/412347 US       |    | Server Consolidation                                                                                                               |
| 82214240     | Granted     | 8880963       | 9/6/2005    | 11/4/2014  | 12/065664 US       |    | Message Processing Device And Method Thereof                                                                                       |
| 82214258     | Granted     | 8521652       | 5/19/2006   | 8/27/2013  | 11/437383 US       |    | Discovering Licenses In Software Files                                                                                             |
| 82214297     | Published   |               | 10/31/2006  |            | 11/591344 US       |    | Automated Management Of Application-specific Tasks From The Internet Via Distributed Task Manager Agents In A Local Area Network   |
| 82214357     | Granted     | 7561027       | 10/26/2006  | 40008      | 11/552983 US       |    | SENSING DEVICE                                                                                                                     |
| 82214363     | Granted     | 7770056       | 10/17/2007  | 8/3/2010   | 11/873713 US       |    | SYSTEM AND METHOD FOR DYNAMIC PAGE CLASSIFICATION FOR MEMORY DUMPING                                                               |
| 82214441     | Granted     | 8478851       | 1/3/2007    | 7/2/2013   | 12/160729 US       |    | APPARATUS FOR USE WITH A GROUP COMMUNICATION NETWORK                                                                               |
| 82214498     | Application |               | 4/27/2006   |            | 11/414274 US       |    | A System And Method For Product Portfolio Selection Based On A Product Impact Metric                                               |
| 82214501     | Granted     | 8042166       | 10/26/2005  | 10/18/2011 | 11/259285 US       |    | Printing via user equipment                                                                                                        |
| 82214567     | Granted     | 7490108       | 10/19/2005  | 2/10/2009  | 11/254112 US       |    | Data Consolidation                                                                                                                 |
| 82214615     | Granted     | 7894699       | 10/16/2006  | 2/22/2011  | 11/582207 US       |    | Photonic-based Interconnects For Interconnecting Multiple Integrated Circuits                                                      |
| 82214666     | Granted     | 7843026       | 11/30/2005  | 11/30/2010 | 11/290685 US       |    | Composite Material With Conductive Structures Of Random Size, Shape, Orientation, Or Location                                      |
| 82214672     | Granted     | 7924413       | 2/29/2008   | 4/12/2011  | 12/074133 US       |    | Nanowire-based Photonic Devices                                                                                                    |
| 82214690     | Granted     | 8143682       | 10/31/2006  | 3/27/2012  | 11/590959 US       |    | METHODS AND SYSTEMS FOR IMPLEMENTING LOGIC GATES WITH SPINTRONIC DEVICES LOCATED AT NANOWIRE CROSSBAR JUNCTIONS OF CROSSBAR ARRAYS |
| 82214693     | Granted     | 7465954       | 4/28/2006   | 12/16/2008 | 11/413375 US       |    | Nanowire Devices And Systems, Light-emitting Nanowires, And Methods Of Precisely Positioning Nanoparticles                         |
| 82214729     | Granted     | 7319416       | 1/30/2006   | 1/15/2008  | 11/343325 US       |    | Tunneling-resistor-junction-based Microscale/nanoscale Demultiplexer Arrays                                                        |
| 82214867     | Granted     | 7447022       | 8/9/2006    | 11/4/2008  | 11/501657 US       |    | Rack-mount Equipment Bay Cooling Heat Exchanger                                                                                    |
| 82214879     | Granted     | 7856571       | 1/22/2007   | 12/21/2010 | 11/625562 US       |    | METHOD AND SYSTEM FOR COMMUNICATION EMPLOYING DUAL SLEW RATES                                                                      |

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| 82214915     | Granted   | 7183924       | 10/13/2005  | 2/27/2007  | 11/249544          | US | Storing Configuration Information And A Service Record For An Item In An Rfid Tag                                    |
| 82214939     | Granted   | 8898265       | 6/22/2006   | 11/25/2014 | 11/474117          | US | Determining Data Flows In A Network                                                                                  |
| 82215125     | Granted   | 7969969       | 7/5/2007    | 40722      | 11/822353          | US | Signalling Gateway                                                                                                   |
| 82215239     | Granted   | 8190416       | 10/17/2007  | 5/29/2012  | 11/873636          | US | COMPUTER NETWORK MANAGEMENT                                                                                          |
| 82215293     | Granted   | 8001407       | 10/31/2006  | 8/16/2011  | 11/590320          | US | Server Configured For Managing Power And Performance                                                                 |
| 82215368     | Granted   | 8576505       | 10/28/2005  | 11/5/2013  | 11/260994          | US | Tape Drive Apparatus And Method                                                                                      |
| 82215374     | Granted   | 8028163       | 7/26/2006   | 9/27/2011  | 11/493005          | US | A METHOD OF DIGITALLY SIGNING DATA AND A DATA REPOSITORY STORING DIGITALLY SIGNED DATA                               |
| 82215485     | Granted   | 7289289       | 10/27/2005  | 10/30/2007 | 11/260791          | US | Recording Servo Stripes Onto A Servo Track                                                                           |
| 82215551     | Granted   | 7609703       | 9/15/2006   | 10/27/2009 | 11/522151          | US | GROUP COMMUNICATION SYSTEM AND METHOD                                                                                |
| 82215554     | Granted   | 7647454       | 6/12/2006   | 1/12/2010  | 11/450987          | US | Transactional Shared Memory System And Method Of Control                                                             |
| 82215602     | Granted   | 8467301       | 6/5/2006    | 6/18/2013  | 11/446914          | US | Router Misconfiguration Diagnosis                                                                                    |
| 82215740     | Granted   | 8972345       | 9/27/2006   | 3/3/2015   | 11/527877          | US | Modifying Data Structures In Distributed File Systems                                                                |
| 82215746     | Granted   | 7779960       | 8/18/2006   | 8/24/2010  | 11/506644          | US | System And Method For Noise Suppression                                                                              |
| 82215809     | Granted   | 8856105       | 4/28/2006   | 10/7/2014  | 11/413808          | US | Dynamic Data Navigation                                                                                              |
| 82215986     | Granted   | 7895409       | 7/30/2007   | 2/22/2011  | 11/888098          | US | Application Inspection Tool For Determining A Security Partition                                                     |
| 82216004     | Granted   | 7112069       | 8/18/2005   | 38986      | 11/206287          | US | Attachment Plate For Directly Mating Circuit Boards                                                                  |
| 82216058     | Granted   | 9015308       | 1/17/2007   | 4/21/2015  | 12/162979          | US | Multilayer Distributed Processing System                                                                             |
| 82216103     | Granted   | 7606272       | 1/31/2006   | 10/20/2009 | 11/343434          | US | Methods And Systems For Avoiding Transmission-channel Disruptions                                                    |
| 82216169     | Granted   | 7676671       | 10/31/2006  | 3/9/2010   | 11/554761          | US | SYSTEM FOR MULTI-PROFILE BOOT SELECTION OF AN EMBEDDED DEVICE                                                        |
| 82216178     | Published |               | 9/19/2006   |            | 11/523868          | US | Method And System Using One-time Pad Data To Evidence The Possession Of A Particular Attribute                       |
| 82216253     | Granted   | 7636828       | 10/31/2006  | 12/22/2009 | 11/590116          | US | Method For Automatic Adjustment Of Timing Of Double Data Rate Interface                                              |
| 82216367     | Granted   | 9038051       | 10/31/2006  | 5/19/2015  | 11/590077          | US | Selecting Patch Solutions Based On Availability Of Information Regarding Patches Previously Installed On User System |
| 82216424     | Granted   | 8291334       | 4/30/2007   | 10/16/2012 | 11/799427          | US | Method And Apparatus For Creating A Digital Dashboard                                                                |
| 82216499     | Granted   | 8261332       | 7/8/2008    | 9/4/2012   | 12/169113          | US | ESTABLISHING A TRUST RELATIONSHIP BETWEEN COMPUTING ENTITIES                                                         |
| 82216505     | Granted   | 8248816       | 10/31/2006  | 8/21/2012  | 11/591021          | US | A Layout Geometry For Printed Circuit Boards With Adaptive Antipads                                                  |
| 82216556     | Granted   | 7519767       | 5/30/2006   | 4/14/2009  | 11/442128          | US | Emulated Tape-based Storage Media                                                                                    |
| 82216604     | Granted   | 8149094       | 4/30/2007   | 4/3/2012   | 11/799146          | US | Clustering Methods For Radio-frequency-identifier Networks                                                           |

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| 82216607     | Granted   | 8093989       | 12/6/2006   | 1/10/2012  | 11/635738          | US | Method And System For Scheduling Multi-radio-frequency Identification-tag-reader Networks To Increase Interrogation Efficiency |
| 82216610     | Granted   | 8052055       | 1/31/2007   | 11/8/2011  | 11/701225          | US | Method And System For Perturbing Multi-radio-frequency Identification-tag-reader Networks To Increase Interrogation Efficiency |
| 82216745     | Granted   | 7716425       | 9/27/2006   | 5/11/2010  | 11/527868          | US | Prefetching Data In Distributed Storage Systems                                                                                |
| 82216751     | Granted   | 7898986       | 10/31/2006  | 3/1/2011   | 11/590499          | US | Port Configuration                                                                                                             |
| 82216814     | Granted   | 8510833       | 10/27/2005  | 8/13/2013  | 11/260130          | US | Connection-rate Filtering Using ARP Requests                                                                                   |
| 82216817     | Granted   | 8533817       | 10/5/2005   | 9/10/2013  | 11/244505          | US | Method And Apparatus For Connection-rate Filtering                                                                             |
| 82217000     | Granted   | 7694169       | 1/31/2007   | 4/6/2010   | 11/700126          | US | Restoring A Client Device                                                                                                      |
| 82217114     | Allowed   |               | 10/13/2006  |            | 11/580459          | US | Graphical Representation Of A Port Security State                                                                              |
| 82217165     | Granted   | 8103756       | 10/31/2006  | 1/24/2012  | 11/555189          | US | Network Access Device Capability Alert Mechanism                                                                               |
| 82217171     | Granted   | 7971193       | 7/14/2006   | 6/28/2011  | 11/486552          | US | METHODS FOR PERFORMING CROSS MODULE CONTEXT-SENSITIVE SECURITY ANALYSIS                                                        |
| 82217174     | Granted   | 7644204       | 10/31/2006  | 1/5/2010   | 11/554838          | US | SCSI I/O Coordinator                                                                                                           |
| 82217177     | Granted   | 7555607       | 11/10/2005  | 6/30/2009  | 11/271535          | US | PROGRAM THREAD SYNCHRONIZATION FOR INSTRUCTION CACHELINES                                                                      |
| 82217183     | Granted   | 7984242       | 6/1/2009    | 7/19/2011  | 12/476109          | US | Program Thread Synchronization                                                                                                 |
| 82217189     | Granted   | 7647530       | 10/13/2006  | 1/12/2010  | 11/580449          | US | Network Fault Pattern Analyzer                                                                                                 |
| 82217225     | Granted   | 8188494       | 6/28/2006   | 5/29/2012  | 11/477298          | US | UTILIZING NANOWIRE FOR GENERATING WHITE LIGHT                                                                                  |
| 82217228     | Granted   | 8639551       | 7/31/2006   | 1/28/2014  | 11/496948          | US | METHOD AND SYSTEM FOR WORKFORCE RELATED RESOURCE PLANNING                                                                      |
| 82217237     | Granted   | 8396966       | 10/26/2005  | 3/12/2013  | 11/260514          | US | METHOD AND AN APPARATUS FOR CREATING VISUAL REPRESENTATIONS OF FARMS THAT ENABLES CONNECTING FARMS SECURELY                    |
| 82217411     | Granted   | 9043465       | 7/10/2007   | 5/26/2015  | 12/373119          | US | METHOD OF PROVIDING SERVICES IN A NETWORK, NETWORK ELEMENT AND COMPUTER PROGRAM PRODUCT                                        |
| 82217474     | Published |               | 3/20/2008   |            | 12/052686          | US | Data Processing System And Method                                                                                              |
| 82217480     | Granted   | 7934105       | 7/26/2006   | 4/26/2011  | 11/494780          | US | Data Transfer Device                                                                                                           |
| 82217492     | Granted   | 8170539       | 5/30/2006   | 5/1/2012   | 11/442880          | US | Messaging With Proprietary Attributes                                                                                          |
| 82217540     | Granted   | D570981       | 4/28/2006   | 6/10/2008  | 29/258894          | US | Fan Module Having A Handle                                                                                                     |
| 82217600     | Granted   | 7467268       | 4/14/2006   | 39798      | 11/404240          | US | CONCURRENT DATA RESTORE AND BACKGROUND COPY OPERATIONS IN STORAGE NETWORKS                                                     |
| 82217603     | Granted   | 7643426       | 4/27/2006   | 1/5/2010   | 11/412442          | US | Path Selection In A Network                                                                                                    |
| 82217681     | Granted   | 7092850       | 9/29/2005   | 8/15/2006  | 11/238442          | US | Sensor Signal Debouncing                                                                                                       |
| 82217687     | Granted   | 8306911       | 1/31/2007   | 11/6/2012  | 11/701294          | US | PAYMENT OPTION ANALYZER BASED ON MEASURED UTILIZATION                                                                          |

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| 82217789     | Granted   | 8108511       | 5/26/2006   | 1/31/2012  | 11/41694           | US | Abstraction Of Multiple Aggregated Physical Counters In A Virtual Counter                                                   |
| 82217816     | Granted   | 8260790       | 4/27/2007   | 9/4/2012   | 11/790894          | US | SYSTEM AND METHOD FOR USING INDEXES TO PARSE STRUCTURED XML DOCUMENTS                                                       |
| 82217870     | Granted   | 7721133       | 4/27/2006   | 5/18/2010  | 11/412384          | US | Systems And Methods Of Synchronizing Reference Frequencies                                                                  |
| 82217930     | Granted   | 7823154       | 9/16/2005   | 10/26/2010 | 11/228901          | US | System And Method For Providing, By A Plurality Of Schedulers, Differentiated Service To Consumers Of Distributed Resources |
| 82217933     | Granted   | 7743276       | 9/27/2006   | 6/22/2010  | 11/527875          | US | SUFFICIENT FREE SPACE FOR REDUNDANCY RECOVERY WITHIN A DISTRIBUTED DATA-STORAGE SYSTEM                                      |
| 82217999     | Granted   | 7610412       | 10/17/2006  | 10/27/2009 | 11/582068          | US | Throttling Communication Between Software Processes                                                                         |
| 82218002     | Published |               | 10/31/2006  |            | 11/590497          | US | Memory Management                                                                                                           |
| 82218047     | Granted   | 8041906       | 10/31/2006  | 10/18/2011 | 11/590498          | US | Notification Processing                                                                                                     |
| 82218110     | Granted   | 8046447       | 6/30/2006   | 10/25/2011 | 11/477864          | US | Mechanism For Specifying Port-related Data From Network Devices                                                             |
| 82218125     | Granted   | 7796597       | 10/17/2006  | 9/14/2010  | 11/582923          | US | AUTO CONFIGURATION OF STATIC RENDEZVOUS POINTS USING BOOTSTRAP ROUTER PROTOCOL MESSAGES FROM PIM SM                         |
| 82218377     | Granted   | 8255577       | 4/25/2008   | 8/28/2012  | 12/109577          | US | An I/O Forwarding Technique For Multi-interrupt Capable Devices                                                             |
| 82218434     | Granted   | 7352941       | 10/31/2006  | 39539      | 11/590410          | US | Method And Apparatus For Electromagnetic Resonance And Amplification Using Negative Index Material                          |
| 82218548     | Granted   | 8010083       | 5/21/2007   | 8/30/2011  | 11/802157          | US | DETECTION OF CLONED IDENTIFIERS IN COMMUNICATION SYSTEMS                                                                    |
| 82218608     | Granted   | 7873850       | 10/11/2006  | 1/18/2011  | 11/546096          | US | System And Method Of Controlling Power Consumption And Associated Heat Generated By A Computing Device                      |
| 82218614     | Granted   | 9071506       | 6/29/2007   | 6/30/2015  | 11/819990          | US | Accessing Web Services Using Network Management Information                                                                 |
| 82218665     | Granted   | 8639904       | 10/22/2009  | 1/28/2014  | 12/603905          | US | Method And System For Managing Heap Across Process Replication                                                              |
| 82218749     | Granted   | 7587555       | 11/10/2005  | 9/8/2009   | 11/272197          | US | Program Thread Synchronization                                                                                              |
| 82218791     | Granted   | 7243877       | 4/7/2006    | 7/17/2007  | 11/400648          | US | Tape Reel                                                                                                                   |
| 82218797     | Granted   | 8438346       | 4/27/2006   | 5/7/2013   | 11/412485          | US | Synchronization Of A Virtual Storage System And An Actual Storage System                                                    |
| 82218851     | Granted   | 7783935       | 6/2/2006    | 8/24/2010  | 11/445589          | US | Bit Error Rate Reduction Buffer                                                                                             |
| 82218854     | Published |               | 7/6/2010    |            | 12/831082          | US | Bit Error Rate Reduction Buffer, Method And Apparatus                                                                       |
| 82218860     | Granted   | 9137179       | 7/26/2006   | 9/15/2015  | 11/493285          | US | Memory-mapped Buffers For Network Interface Controllers                                                                     |

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| 82218917     | Published |               | 9/18/2006   |            | 11/523442          | US | Distributed-Leader-Election Service For A Distributed Computer System                                                                                    |
| 82218926     | Granted   | 8402463       | 10/30/2006  | 3/19/2013  | 11/554566          | US | Hardware Threads Processor Core Utilization                                                                                                              |
| 82218974     | Granted   | 8209682       | 7/26/2006   | 6/26/2012  | 11/493250          | US | System And Method For Controlling Aggregate CPU Usage                                                                                                    |
|              |           |               |             |            |                    |    | Virtual Machines And Driver Domains Over A Plurality Of Scheduling Intervals                                                                             |
| 82218977     | Granted   | 8146079       | 7/26/2006   | 3/27/2012  | 11/494187          | US | Systems And Methods For Controlling Resource Usage By A Driver Domain On Behalf Of A Virtual Machine                                                     |
| 82219103     | Granted   | 7639953       | 7/27/2006   | 12/29/2009 | 11/494815          | US | Compact Systems For Generating Polarization-entangled Photons                                                                                            |
| 82219127     | Granted   | 7844649       | 4/20/2006   | 11/30/2010 | 11/407513          | US | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS                                                                                      |
| 82219163     | Granted   | 7742906       | 3/6/2007    | 6/22/2010  | 11/714509          | US | Balancing Collections Of Vertices In A Network                                                                                                           |
| 82219175     | Granted   | 7924283       | 9/19/2006   | 4/12/2011  | 11/523240          | US | TIME RELEVANCE-BASED VISUALIZATION OF DATA                                                                                                               |
| 82219178     | Granted   | 7895666       | 9/1/2006    | 2/22/2011  | 11/514634          | US | Data Structure Representation Using Hash-based Directed Acyclic Graphs And Related Method                                                                |
| 82219223     | Granted   | 7529437       | 7/27/2006   | 5/5/2009   | 11/494814          | US | SCALABLE AND DEFECT-TOLERANT QUANTUM-DOT-BASED QUANTUM COMPUTER ARCHITECTURES AND METHODS FOR FABRICATING QUANTUM DOTS IN QUANTUM COMPUTER ARCHITECTURES |
| 82219226     | Granted   | 7373059       | 9/22/2006   | 5/13/2008  | 11/525717          | US | COMPACT, SINGLE CHIP-BASED, ENTANGLED POLARIZATION-STATE PHOTON SOURCES AND METHODS FOR GENERATING PHOTONS IN ENTANGLED POLARIZATION STATES              |
| 82219313     | Granted   | 7855957       | 8/30/2006   | 12/21/2010 | 11/468577          | US | Method And System Of Transmit Load Balancing Across Multiple Physical Ports                                                                              |
| 82219361     | Granted   | 7864958       | 6/16/2006   | 1/4/2011   | 11/454632          | US | Quantum Key Distribution Method And Apparatus                                                                                                            |
| 82219367     | Granted   | 8842839       | 7/21/2006   | 9/23/2014  | 11/490853          | US | Device With Multiple One-time Pads And Method Of Managing Such A Device                                                                                  |
| 82219373     | Granted   | 8250363       | 7/21/2006   | 41142      | 11/490852          | US | Method Of Provisioning Devices With One-time Pad Data, Device For Use In Such Method, And Service Usage Tracking Based On One-time Pad Data              |
| 82219409     | Granted   | 7502888       | 2/7/2006    | 3/10/2009  | 11/348686          | US | Symmetric Multiprocessor System                                                                                                                          |
| 82219412     | Granted   | 8020715       | 5/17/2007   | 9/20/2011  | 11/804110          | US | Standalone Open Frame                                                                                                                                    |
| 82219499     | Granted   | 8027338       | 8/31/2006   | 9/27/2011  | 11/469180          | US | Discontinuing The Implementation Of An Aggregation Protocol                                                                                              |
| 82219502     | Granted   | 7644377       | 1/31/2007   | 1/5/2010   | 11/700374          | US | Generating A Configuration Of A System That Satisfies Constraints Contained In Models                                                                    |
| 82219664     | Granted   | 7376805       | 4/21/2006   | 5/20/2008  | 11/409471          | US | Distributed Storage Array                                                                                                                                |

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| 82219667     | Granted   | 7487311       | 3/14/2008   | 2/3/2009   | 12/048270          | US | System And Method For Asynchronous Backup Of Virtual Disks In A Distributed Storage Array                                     |
| 82219673     | Granted   | 7813069       | 1/31/2008   | 10/12/2010 | 12/023126          | US | Method And Apparatus For Controlling Motion Of Storage Media                                                                  |
| 82219853     | Granted   | 8244825       | 11/6/2006   | 8/14/2012  | 11/556973          | US | RDMA Data To Responder Node Coherency Domain                                                                                  |
| 82219868     | Granted   | 7391109       | 5/22/2006   | 6/24/2008  | 11/438167          | US | Integrated Circuit Interconnect                                                                                               |
| 82220000     | Published |               | 11/3/2008   |            | 12/263506          | US | Logging System Events                                                                                                         |
| 82220048     | Granted   | 7710862       | 8/30/2006   | 5/4/2010   | 11/468537          | US | METHOD AND SYSTEM OF ASSIGNING MEDIA ACCESS CONTROL (MAC) ADDRESSES ACROSS TEAMED COMMUNICATION PORTS                         |
| 82220054     | Granted   | 7821973       | 10/24/2006  | 10/26/2010 | 11/552322          | US | Sharing Of Host Bus Adapter Context                                                                                           |
| 82220057     | Granted   | 8074009       | 9/16/2010   | 12/6/2011  | 12/884069          | US | Sharing Of Host Bus Adapter Context                                                                                           |
| 82220096     | Granted   | 7335526       | 10/31/2005  | 39504      | 11/263788          | US | Sensing System                                                                                                                |
| 82220105     | Granted   | 7813286       | 8/30/2006   | 10/12/2010 | 11/468499          | US | METHOD AND SYSTEM OF DISTRIBUTING MULTICAST GROUP JOIN REQUESTS IN COMPUTER SYSTEMS OPERATING WITH TEAMED COMMUNICATION PORTS |
| 82220234     | Granted   | 8031632       | 8/30/2006   | 40820      | 11/468442          | US | Method And System Of Implementing Virtual Local Area Networks (VLANS) With Teamed Communication Ports                         |
| 82220237     | Granted   | 7649892       | 8/30/2006   | 1/19/2010  | 11/468615          | US | METHOD AND SYSTEM OF NETWORK COMMUNICATION RECEIVE LOAD BALANCING                                                             |
| 82220294     | Granted   | 8283556       | 10/8/2008   | 10/9/2012  | 12/247860          | US | Nanowire-Based Device And Array With Coaxial Electrodes Interface Module                                                      |
| 82220312     | Granted   | 8327389       | 7/10/2007   | 12/4/2012  | 12/375729          | US | Parimutuel Content Provisioning                                                                                               |
| 82220357     | Granted   | 7707215       | 10/17/2006  | 4/27/2010  | 11/550355          | US | Thermal Management Of Data Centers                                                                                            |
| 82220477     | Granted   | 7620613       | 7/28/2006   | 11/17/2009 | 11/494942          | US | Management Of Data Centers Using A Model                                                                                      |
| 82220480     | Granted   | 7644051       | 7/28/2006   | 1/5/2010   | 11/494918          | US | Management Of Data Centers Using A Model                                                                                      |
| 82220549     | Granted   | 8799591       | 1/30/2007   | 8/5/2014   | 11/700747          | US | READ-WRITE SPINLOCK WITH NO MUTUAL EXCLUSION AMONG READERS                                                                    |
| 82220555     | Granted   | 8451317       | 4/30/2007   | 5/28/2013  | 11/799386          | US | Indexing A Data Stream                                                                                                        |
| 82220606     | Granted   | 7624233       | 8/22/2006   | 11/24/2009 | 11/508051          | US | Portable Storage Device                                                                                                       |
| 82220618     | Granted   | 5920620       | 1/17/1997   | 7/6/1999   | 08/784052          | US | Channel Establishing Method Of Point-to-multipoint And Multipoint-to-point Communications                                     |
| 82220858     | Granted   | 6826456       | 5/4/2001    | 11/30/2004 | 09/848999          | US | System And Method For Controlling Server Chassis Cooling Fans                                                                 |
| 82220861     | Granted   | 6934786       | 5/4/2001    | 8/23/2005  | 09/848816          | US | Server Chassis Hardware Master System And Method                                                                              |
| 82220864     | Granted   | 6871300       | 5/4/2001    | 3/22/2005  | 09/848807          | US | Embedded Server Chassis Hardware Master System And Method                                                                     |
| 82220930     | Granted   | 7606842       | 9/27/2006   | 10/20/2009 | 11/535713          | US | METHOD OF MERGING A CLONE FILE SYSTEM WITH AN ORIGINAL FILE SYSTEM                                                            |
| 82221185     | Granted   | 7743053       | 10/17/2006  | 6/22/2010  | 11/581942          | US | Hybrid Database Query Caching                                                                                                 |
| 82221359     | Granted   | 7600111       | 9/20/2006   | 10/6/2009  | 11/523870          | US | Method Of Restarting A Computer Platform                                                                                      |

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| 82221803     | Granted   | 8019666       | 9/24/2007   | 9/13/2011  | 11/860084          | US | AUCTION METHOD AND APPARATUS                                                                                                               |
| 82221920     | Granted   | 7451246       | 4/19/2006   | 11/11/2008 | 11/406242          | US | Indirectly Controlling A Target Device On A Network                                                                                        |
| 82222034     | Granted   | 9128766       | 4/24/2006   | 9/8/2015   | 11/409851          | US | Computer Workload Redistribution Schedule                                                                                                  |
| 82222049     | Granted   | 8060436       | 9/16/2002   | 11/15/2011 | 10/244686          | US | Software Application Domain And Storage Domain Risk Analysis Process And Method                                                            |
| 82222058     | Granted   | 7249347       | 9/16/2002   | 7/24/2007  | 10/244694          | US | Software Application Domain And Storage Domain Interface Process And Method                                                                |
| 82222097     | Granted   | 7374441       | 9/15/2006   | 5/20/2008  | 11/532331          | US | ZERO INSERTION FORCE CONNECTOR ASSEMBLY FOR CIRCUIT BOARDS/CARDS                                                                           |
| 82222106     | Published |               | 1/31/2007   |            | 11/669908          | US | Data Storage System                                                                                                                        |
| 82222121     | Granted   | 7933993       | 4/24/2006   | 40659      | 11/409852          | US | Relocatable Virtual Port For Accessing External Storage                                                                                    |
| 82222157     | Allowed   |               | 1/29/2008   |            | 12/021971          | US | Data Processing System And Method                                                                                                          |
| 82222235     | Granted   | 7241096       | 6/24/2005   | 7/10/2007  | 11/160472          | US | Captive Screw With Deployment Knob                                                                                                         |
| 82222283     | Granted   | 9052916       | 9/21/2006   | 6/9/2015   | 11/524680          | US | System ROM With An Embedded Disk Image                                                                                                     |
| 82222301     | Granted   | 7545841       | 4/24/2007   | 6/9/2009   | 11/789283          | US | Composite Material With Proximal Gain Medium                                                                                               |
| 82222358     | Granted   | 7449912       | 1/26/2007   | 11/11/2008 | 11/627730          | US | FAULT DETECTION CIRCUIT                                                                                                                    |
| 82222361     | Granted   | 7962734       | 3/15/2007   | 6/14/2011  | 11/686528          | US | METHOD OF RESTARTING A COMPUTER PLATFORM                                                                                                   |
| 82222670     | Granted   | 7926089       | 7/14/2006   | 4/12/2011  | 11/486684          | US | Router For Managing Trust Relationships                                                                                                    |
| 82222718     | Granted   | 7610383       | 8/11/2006   | 10/27/2009 | 11/502890          | US | Data-object-related-request Routing In A Dynamic, Distributed Data-storage System                                                          |
| 82222934     | Granted   | 8387053       | 1/25/2007   | 2/26/2013  | 11/626922          | US | METHOD AND SYSTEM FOR ENHANCING COMPUTER PROCESSING PERFORMANCE                                                                            |
| 82223057     | Granted   | 8885928       | 10/25/2006  | 11/11/2014 | 11/552968          | US | CLASSIFICATION USING FEATURE SCALING                                                                                                       |
| 82223093     | Granted   | 6424929       | 9/20/1999   | 7/23/2002  | 09/399373          | US | Method For Detecting Outlier Measures Of Activity                                                                                          |
| 82223117     | Granted   | 5926462       | 11/16/1995  | 7/20/1999  | 08/558729          | US | METHOD OF DETERMINING TOPOLOGY OF A NETWORK OF OBJECTS WHICH COMPARES THE SIMILARITY OF THE TRAFFIC SEQUENCES/VOLUMES OF A PAIR OF DEVICES |
| 82223162     | Granted   | 7145881       | 10/4/2000   | 12/5/2006  | 09/678783          | US | Method Of Determining The Route Of Packets Through A Network Of Communicating Objects                                                      |
| 82223234     | Granted   | 5933416       | 2/9/1996    | 8/3/1999   | 08/599310          | US | Method Of Determining The Topology Of A Network Of Objects                                                                                 |
| 82223345     | Granted   | 6928475       | 2/7/2002    | 8/9/2005   | 10/067362          | US | Method Of Determining The Topology Of A Network Of Objects                                                                                 |
| 82223348     | Granted   | 6728670       | 2/7/2002    | 4/27/2004  | 10/067229          | US | METHOD OF DETERMINING THE TOPOLOGY OF A NETWORK BY TRANSMITTING AND MONITORING SEQUENCES OF ORTHOGONAL SIGNALS                             |
| 82223351     | Granted   | 6829641       | 2/7/2002    | 12/7/2004  | 10/067363          | US | Method Of Determining The Topology Of A Network Of Objects                                                                                 |
| 82223468     | Granted   | 8972613       | 10/31/2006  | 3/3/2015   | 11/590615          | US | System And Method For Increasing Input/output Throughput In A Data Storage System                                                          |

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| 82223471     | Granted   | 8046765       | 7/25/2006   | 10/25/2011 | 11/492376          | US | System And Method For Determining Allocation Of Resources<br>Access Demands To Different Classes Of Service Based At<br>Least In Part On Permitted Degraded Performance |
| 82223480     | Granted   | 7906778       | 4/2/2007    | 3/15/2011  | 11/730486          | US | METHODS OF MAKING NANO-SCALE STRUCTURES HAVING<br>CONTROLLED SIZE, NANOWIRE STRUCTURES AND METHODS<br>OF MAKING THE NANOWIRE STRUCTURES                                 |
| 82223486     | Granted   | 8347726       | 4/25/2007   | 1/8/2013   | 11/739853          | US | FREE-STANDING NANOWIRE SENSOR AND METHODS FOR<br>FORMING AND USING THE SAME                                                                                             |
| 82223495     | Granted   | 8773882       | 4/15/2010   | 7/8/2014   | 12/761300          | US | MIXED-SCALE ELECTRONIC INTERFACES                                                                                                                                       |
| 82223498     | Granted   | 7763978       | 3/28/2007   | 7/27/2010  | 11/729228          | US | Three-dimensional Crossbar Array Systems And Methods For<br>Writing Information To And Reading Information Stored In<br>Three-dimensional Crossbar Array Junctions      |
| 82223531     | Granted   | 7692215       | 1/31/2007   | 4/6/2010   | 11/701086          | US | MIXED-SCALE ELECTRONIC INTERFACE                                                                                                                                        |
| 82223537     | Granted   | 7608905       | 10/17/2006  | 10/27/2009 | 11/581969          | US | Independently Addressable Interdigitated Nanowires                                                                                                                      |
| 82223543     | Granted   | 7560707       | 4/19/2007   | 7/14/2009  | 11/788446          | US | Apparatuses And Methods For Up-converting<br>Electromagnetic Radiation                                                                                                  |
| 82223546     | Granted   | 7719688       | 4/24/2007   | 5/18/2010  | 11/739272          | US | Optical Device And Method Of Making The Same                                                                                                                            |
| 82223594     | Granted   | 7832461       | 2/9/2007    | 11/16/2010 | 11/673410          | US | Cooling Systems And Methods                                                                                                                                             |
| 82223597     | Granted   | 8960268       | 10/6/2010   | 42059      | 12/898776          | US | Methods for Cooling Computers And Electronics                                                                                                                           |
| 82223606     | Granted   | 8046534       | 10/26/2006  | 10/25/2011 | 11/586930          | US | Managing Snapshots In Storage Systems                                                                                                                                   |
| 82223663     | Granted   | 7996250       | 10/30/2006  | 40764      | 11/554541          | US | Workflow Control Using An Aggregate Utility Function                                                                                                                    |
| 82223789     | Granted   | 8826024       | 10/23/2006  | 9/2/2014   | 11/584859          | US | Trusted Compliance Operations Inside Secure Computing<br>Boundaries                                                                                                     |
| 82223792     | Granted   | 7996680       | 9/27/2006   | 8/9/2011   | 11/527791          | US | Secure Data Log Management                                                                                                                                              |
| 82223918     | Granted   | 8183566       | 3/1/2007    | 5/22/2012  | 11/681068          | US | Hetero-crystalline Semiconductor Device And Method Of<br>Making Same                                                                                                    |
| 82224032     | Granted   | D590403       | 6/30/1996   | 4/14/2009  | 29/262397          | US | Computer Controller Front Bezel                                                                                                                                         |
| 82224035     | Granted   | D635576       | 2/11/2009   | 4/5/2011   | 29/332219          | US | Computer Controller Front Bezel                                                                                                                                         |
| 82224038     | Granted   | D595721       | 2/11/2009   | 7/7/2009   | 29/332250          | US | Computer Controller Front Bezel                                                                                                                                         |
| 82224047     | Published |               | 9/13/2006   |            | 11/531652          | US | Determining Most Valuable Ordering Of Items For<br>Presentation                                                                                                         |
| 82224173     | Granted   | 7844841       | 4/30/2007   | 11/30/2010 | 11/742440          | US | ELECTRONIC DEVICE                                                                                                                                                       |
| 82224305     | Granted   | 7877433       | 10/16/2006  | 1/25/2011  | 11/581828          | US | Infrastructure By Contract                                                                                                                                              |
| 82224422     | Granted   | 8051250       | 3/14/2007   | 11/1/2011  | 11/686132          | US | SYSTEMS AND METHODS FOR PUSHING DATA                                                                                                                                    |
| 82224428     | Granted   | 7975205       | 1/26/2007   | 7/5/2011   | 11/627519          | US | ERROR CORRECTION ALGORITHM SELECTION BASED UPON<br>MEMORY ORGANIZATION                                                                                                  |
| 82224434     | Published |               | 10/27/2006  |            | 11/588608          | US | Producing A Feature In Response To A Received Expression                                                                                                                |
| 82224530     | Granted   | 7792353       | 10/31/2006  | 9/7/2010   | 11/555036          | US | RETRAINING A MACHINE-LEARNING CLASSIFIER USING RE-<br>LABELED TRAINING SAMPLES                                                                                          |

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| 82224533     | Published |               | 10/31/2006  |            | 11/590466          | US | Calculating An Aggregate Of Attribute Values Associated With Plural Cases                                               |
| 82224551     | Granted   | 8504943       | 10/24/2006  | 8/6/2013   | 11/585497          | US | Displaying Group Icons Representing Respective Groups Of Nodes                                                          |
| 82224668     | Granted   | 7895121       | 10/31/2006  | 2/22/2011  | 11/591388          | US | Method And System For Tracking Conversions In A System For Targeted Data Delivery                                       |
| 82224671     | Published |               | 6/16/2006   |            | 11/454733          | US | Automated Service Level Management System                                                                               |
| 82224722     | Granted   | 7782632       | 12/19/2006  | 8/24/2010  | 11/641243          | US | ELECTRICAL POWER CONNECTION WITH TWO POWER CONNECTORS ON A MODULE IN AN ELECTRONIC SYSTEM                               |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82224746     | Granted   | 7923802       | 10/13/2006  | 4/12/2011  | 11/580647          | US | Method And Apparatus For Forming A Photodiode                                                                           |
| 82224863     | Granted   | D577026       | 7/17/2006   | 9/16/2008  | 29/263157          | US | Computer Module Having A Handle                                                                                         |
| 82224914     | Granted   | 7856549       | 1/24/2007   | 12/21/2010 | 11/657144          | US | REGULATING POWER CONSUMPTION                                                                                            |
| 82224968     | Granted   | 7769173       | 10/30/2006  | 8/3/2010   | 11/590493          | US | Methods And Systems For Executing Bit-commitment Protocols That Are Based On Entangled Quantum States And A Third Party |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225043     | Granted   | 7924810       | 9/19/2007   | 4/12/2011  | 11/902131          | US | Method And Computing System For Controlling Access                                                                      |
| 82225229     | Published |               | 10/29/2007  |            | 11/926362          | US | A METHOD OF IDENTIFYING AN EXTRACTABLE PORTION OF A SOURCE MACHINE-READABLE DOCUMENT                                    |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225244     | Granted   | 8438560       | 10/18/2007  | 5/7/2013   | 11/874440          | US | Resource Assessment Method And System                                                                                   |
| 82225280     | Granted   | 8089882       | 9/4/2007    | 1/3/2012   | 11/849364          | US | Load-aware Network Path Configuration                                                                                   |
| 82225286     | Granted   | 8509075       | 9/4/2007    | 8/13/2013  | 11/849358          | US | Data-type-based Network Path Configuration                                                                              |
| 82225292     | Granted   | 7995584       | 6/19/2008   | 8/9/2011   | 12/141927          | US | Method And Apparatus For Detecting Malicious Routers From Packet Payload                                                |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225295     | Granted   | 7725556       | 10/27/2006  | 5/25/2010  | 11/553953          | US | Computer System With Concurrent Direct Memory Access                                                                    |
| 82225349     | Granted   | 8782779       | 9/26/2007   | 7/15/2014  | 11/862002          | US | System And Method For Achieving Protected Region Within Computer System                                                 |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225403     | Granted   | 8291488       | 6/29/2006   | 10/16/2012 | 12/305856          | US | Remote Connection Between Intermediary Device And Computing Device Via Central Authority Software                       |
| 82225433     | Granted   | 8886892       | 1/26/2007   | 11/11/2014 | 11/627469          | US | MEMORY MODULE AND METHOD EMPLOYING A MULTIPLEXER TO REPLACE A MEMORY DEVICE                                             |
| 82225475     | Granted   | 8612973       | 9/26/2007   | 12/17/2013 | 11/861846          | US | Method And System For Handling Interrupts Within Computer System During Hardware Resource Migration                     |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225544     | Granted   | 8045562       | 10/31/2006  | 10/25/2011 | 11/590148          | US | Estimating Link Interference And Bandwidth                                                                              |
| 82225547     | Granted   | 7965655       | 1/31/2007   | 6/21/2011  | 11/700579          | US | DISTRIBUTED NETWORK DISTANCE DETERMINATION USING A DISTRIBUTED HASH TABLE OVERLAY NETWORK                               |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225550     | Granted   | 7818508       | 4/27/2007   | 10/19/2010 | 11/741453          | US | SYSTEM AND METHOD FOR ACHIEVING ENHANCED MEMORY ACCESS CAPABILITIES                                                     |
|              |           |               |             |            |                    |    |                                                                                                                         |
| 82225556     | Granted   | 8095630       | 3/20/2007   | 40918      | 11/725715          | US | Network Booting                                                                                                         |

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| 82225658     | Granted   | 7849121       | 10/10/2006  | 12/7/2010  | 11/546158          | US | OPTICAL-BASED, SELF-AUTHENTICATING QUANTUM<br>RANDOM NUMBER GENERATORS                                                |
| 82225718     | Granted   | 7466884       | 10/17/2006  | 12/16/2008 | 11/582088          | US | Photonic-interconnect Systems For Reading Data From<br>Memory Cells And Writing Data To Memory Integrated<br>Circuits |
| 82225739     | Granted   | 8335065       | 4/30/2007   | 12/18/2012 | 11/742522          | US | Overvoltage Protection In A Power Supply                                                                              |
| 82225742     | Granted   | 7780455       | 1/31/2007   | 8/24/2010  | 11/669860          | US | SYSTEM HAVING PRIMARY AND SECONDARY BACKPLANE                                                                         |
| 82225778     | Granted   | 8473791       | 4/30/2007   | 41450      | 11/742446          | US | Redundant Memory To Mask Dram Failures                                                                                |
| 82225781     | Granted   | 8108355       | 10/27/2006  | 1/31/2012  | 11/588617          | US | Providing A Partially Sorted Index                                                                                    |
| 82225853     | Granted   | 7571069       | 12/22/2006  | 40029      | 11/644168          | US | DATA ASSURANCE WORKFLOW DERIVATION AND EXECUTION                                                                      |
| 82225856     | Granted   | 8935206       | 1/31/2007   | 1/13/2015  | 11/700270          | US | Snapshots In Distributed Storage Systems                                                                              |
| 82225925     | Granted   | 8006103       | 10/26/2007  | 8/23/2011  | 11/924889          | US | TPM DEVICE FOR MULTI-PROCESSOR SYSTEMS                                                                                |
| 82226039     | Granted   | 7656727       | 4/25/2007   | 40211      | 11/739875          | US | SEMICONDUCTOR MEMORY DEVICE AND SYSTEM PROVIDING<br>SPARE MEMORY LOCATIONS                                            |
| 82226051     | Published |               | 4/5/2007    |            | 12/594800          | US | Data Transmission System And Method                                                                                   |
| 82226120     | Granted   | 8268720       | 4/30/2007   | 9/18/2012  | 11/742310          | US | Method Of Positioning Catalyst Nanoparticle And Nanowire-<br>based Device Employing Same                              |
| 82226180     | Granted   | 7730365       | 4/30/2007   | 6/1/2010   | 11/742467          | US | WORKLOAD MANAGEMENT FOR MAINTAINING<br>REDUNDANCY OF NON-DATA COMPUTER COMPONENTS                                     |
| 82226225     | Granted   | 7883023       | 1/29/2007   | 2/8/2011   | 11/699397          | US | Fluid Moving Device Having A Fail-safe Operation                                                                      |
| 82226297     | Published |               | 4/14/2008   |            | 12/082737          | US | System And Method For Remote Management Of A<br>Computer                                                              |
| 82226369     | Granted   | 9146719       | 3/20/2007   | 9/29/2015  | 11/725837          | US | DATA LAYOUT USING DATA TYPE INFORMATION                                                                               |
| 82226591     | Published |               | 4/26/2007   |            | 11/796515          | US | Active Control Of Time-varying Spatial Temperature<br>Distribution                                                    |
| 82226672     | Granted   | 8490103       | 4/30/2007   | 7/16/2013  | 11/742553          | US | Allocating Computer Processes To Processor Cores As A<br>Function Of Process Utilizations                             |
| 82226675     | Granted   | 8254579       | 1/31/2007   | 8/28/2012  | 11/700446          | US | Cryptographic Key Distribution Using A Trusted Computing<br>Platform                                                  |
| 82226678     | Granted   | 8245235       | 4/30/2007   | 8/14/2012  | 11/742582          | US | Allocating Computer Resources To Workloads As A Function<br>Of Reliability Indications                                |
| 82226732     | Granted   | 7934069       | 4/27/2007   | 4/26/2011  | 11/796428          | US | Enabling And Disabling Cache In Storage Systems                                                                       |
| 82226804     | Granted   | 7760627       | 7/31/2006   | 7/20/2010  | 11/495572          | US | METHOD AND APPARATUS FOR AUTOMATIC LOAD-<br>BALANCING ON A MULTI-SEGMENT NETWORK                                      |
| 82226867     | Granted   | 7877645       | 7/30/2007   | 1/25/2011  | 11/830802          | US | Use Of Operational Configuration Parameters To Predict<br>System Failures                                             |
| 82226981     | Granted   | 7835610       | 4/11/2007   | 11/16/2010 | 11/786519          | US | Optical Waveguide                                                                                                     |
| 82226984     | Granted   | 7719073       | 1/11/2007   | 5/18/2010  | 11/652220          | US | Capacitively Coupling Layers Of A Multilayer Device                                                                   |

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| 82227026     | Granted | 7756367       | 6/5/2009    | 7/13/2010  | 12/479537          | US | Photonic Systems And Methods For Encoding Data In Capacitive Electromagnetic Waves                                                      |
| 82227029     | Granted | 8009941       | 6/5/2009    | 8/30/2011  | 12/479567          | US | Photonic Systems And Methods For Encoding Data In Capacitive Electromagnetic Waves                                                      |
| 82227044     | Granted | 8788750       | 4/27/2007   | 7/22/2014  | 11/796679          | US | Managing Resources In Cluster Storage Systems                                                                                           |
| 82227161     | Granted | 8898331       | 9/13/2007   | 11/25/2014 | 11/855119          | US | Method, Network And Computer Program For Processing A Content Request                                                                   |
| 82227167     | Granted | 7926031       | 4/18/2007   | 4/12/2011  | 11/736833          | US | Configuration Management Database And System                                                                                            |
| 82227224     | Granted | 7466410       | 1/26/2007   | 12/16/2008 | 11/698320          | US | Photonics-based Sensors And Methods For Detecting Analytes                                                                              |
| 82227227     | Granted | 7582975       | 4/27/2007   | 9/1/2009   | 11/741218          | US | Nanowire Device And Method Of Making The Same                                                                                           |
| 82227230     | Granted | 7688847       | 10/31/2006  | 3/30/2010  | 11/590555          | US | Expected Channel Occupancy Time As A Wireless Link Metric                                                                               |
| 82227347     | Granted | 7929418       | 3/20/2008   | 4/19/2011  | 12/052680          | US | Data Packet Communication Protocol Offload Method And System                                                                            |
| 82227365     | Granted | 7672143       | 5/30/2007   | 3/2/2010   | 11/807641          | US | Card Holder And Bracket In Computer System                                                                                              |
| 82227368     | Granted | 7746654       | 6/7/2007    | 6/29/2010  | 11/811311          | US | ADAPTABLE PLUG-IN MEZZANINE CARD FOR BLADE SERVERS                                                                                      |
| 82227404     | Granted | 7649751       | 6/25/2007   | 1/19/2010  | 11/821618          | US | APPARATUS FOR INEXPENSIVE MEZZANINE-TYPE CARD BOARD-TO-BOARD CONNECTOR BLIND MATE ALIGNMENT SYSTEM USING PRINTED CIRCUIT BOARD MATERIAL |
| 82227482     | Granted | 7924720       | 2/26/2007   | 4/12/2011  | 11/710804          | US | NETWORK TRAFFIC MONITORING                                                                                                              |
| 82227527     | Granted | 9065740       | 8/26/2008   | 6/23/2015  | 12/198801          | US | Prioritising Data Processing Operations                                                                                                 |
| 82227539     | Granted | 8156496       | 1/29/2008   | 4/10/2012  | 12/021945          | US | Data Processing System And Method                                                                                                       |
| 82227545     | Granted | 8566467       | 7/17/2008   | 41569      | 12/175252          | US | Data Processing System And Method                                                                                                       |
| 82227548     | Granted | 8037223       | 6/13/2007   | 10/11/2011 | 11/818204          | US | Reconfigurable I/O Card Pins                                                                                                            |
| 82227602     | Granted | 8553573       | 4/4/2008    | 10/8/2013  | 12/594245          | US | APPARATUS AND METHODS FOR ADAPTIVE THROTTLING OF TRAFFIC ACROSS MULTIPLE NETWORK NODES                                                  |
| 82227668     | Granted | 8204979       | 1/31/2007   | 6/19/2012  | 11/701305          | US | ADAPTIVE CLIENT/SERVER CONTROL PROTOCOL                                                                                                 |
| 82227731     | Granted | 8213430       | 2/28/2007   | 41093      | 11/680095          | US | TRANSMITTING A PACKET FROM A DISTRIBUTED TRUNK SWITCH                                                                                   |
| 82227791     | Granted | 8009438       | 3/29/2007   | 8/30/2011  | 11/729470          | US | Server Infrastructure Having Independent Backplanes To Distribute Power And To Route Signals                                            |
| 82227968     | Granted | 7805566       | 3/29/2007   | 40449      | 11/729488          | US | Replication In Storage Systems Using A Target Port Mimicking A Host Initiator Port                                                      |
| 82227971     | Granted | 8095830       | 4/3/2007    | 1/10/2012  | 11/732454          | US | Diagnosis Of System Health With Event Logs                                                                                              |
| 82227974     | Granted | 8250408       | 4/2/2007    | 8/21/2012  | 11/731981          | US | System Diagnosis                                                                                                                        |
| 82228028     | Granted | 8484310       | 4/8/2008    | 7/9/2013   | 12/099489          | US | Method Of Supplying Advertising Content                                                                                                 |
| 82228034     | Granted | 8650339       | 11/27/2007  | 2/11/2014  | 11/945458          | US | Control Of Data Transfer                                                                                                                |

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| 82228037     | Granted     | 7957134       | 4/10/2007   | 6/7/2011   | 11/784793          | US | System And Method Having Evaporative Cooling For Memory                                                     |
| 82228091     | Granted     | 7991932       | 4/13/2007   | 8/2/2011   | 11/786815          | US | FIRMWARE AND/OR A CHIPSET DETERMINATION OF STATE OF COMPUTER SYSTEM TO SET CHIPSET MODE                     |
| 82228154     | Application |               | 4/30/2007   |            | 11/799059          | US | Availability Management                                                                                     |
| 82228157     | Granted     | 9058127       | 4/27/2007   | 6/16/2015  | 11/796690          | US | Data Transfer In Cluster Storage Systems                                                                    |
| 82228277     | Granted     | 8219918       | 4/27/2007   | 7/10/2012  | 11/796666          | US | Displaying Multiple Storage Windows                                                                         |
| 82228295     | Granted     | 8208386       | 3/5/2007    | 6/26/2012  | 11/714401          | US | DISCOVERY OF NETWORK DEVICES                                                                                |
| 82228298     | Granted     | 8141062       | 1/31/2007   | 3/20/2012  | 11/701290          | US | REPLACING A VARIABLE IN A USE OF THE VARIABLE WITH A VARIANT OF THE VARIABLE (as amended)                   |
| 82228418     | Published   |               | 1/29/2008   |            | 12/022016          | US | Data Processing System And Method                                                                           |
| 82228424     | Granted     | 8055735       | 10/15/2008  | 11/8/2011  | 12/252190          | US | METHOD AND SYSTEM FOR FORMING A CLUSTER OF NETWORKED NODES                                                  |
| 82228472     | Granted     | 8255203       | 4/24/2008   | 8/28/2012  | 12/109269          | US | Method Of Debugging An Executable Computer Program Having Instructions For Different Computer Architectures |
| 82228487     | Published   |               | 4/11/2008   |            | 12/101792          | US | A Method And System For Improving Memory Access Performance                                                 |
| 82228673     | Granted     | 8266439       | 9/12/2007   | 9/11/2012  | 11/854413          | US | Integrity Verification Of Pseudonymized Documents                                                           |
| 82228718     | Granted     | 8767535       | 7/11/2007   | 7/1/2014   | 11/827605          | US | Dynamic Feed Back Control Of Resources In Computing Environments                                            |
| 82228721     | Granted     | 8108266       | 1/29/2007   | 1/31/2012  | 11/699149          | US | METHODS FOR PROVIDING SECURE Ecommerce TRANSACTIONS                                                         |
| 82228928     | Granted     | 8903970       | 4/2/2008    | 12/2/2014  | 12/061222          | US | Explicit Logging Of Network User Node/target Node Coupling                                                  |
| 82229168     | Granted     | D568886       | 4/12/2007   | 5/13/2008  | 29/285837          | US | COMPUTER HAVING A DOOR                                                                                      |
| 82229171     | Granted     | D568887       | 4/12/2007   | 5/13/2008  | 29/285841          | US | COMPUTER HAVING A DOOR                                                                                      |
| 82229174     | Granted     | 7742311       | 4/13/2007   | 6/22/2010  | 11/735067          | US | DAMAGE PREVENTION INTERPOSER FOR ELECTRONIC PACKAGE AND ELECTRONIC INTERCONNECT STRUCTURE                   |
| 82229177     | Granted     | 8909677       | 4/27/2007   | 12/9/2014  | 11/796198          | US | Providing A Distributed Balanced Tree Across Plural Servers                                                 |
| 82229342     | Granted     | 8159948       | 7/11/2007   | 4/17/2012  | 11/827398          | US | Methods And Apparatus For Many-to-one Connection-rate Monitoring                                            |
| 82229348     | Published   |               | 4/24/2008   |            | 12/109236          | US | Data Processing System And Method                                                                           |
| 82229420     | Granted     | 8209365       | 7/17/2008   | 6/26/2012  | 12/175283          | US | A Technique For Virtualizing Storage Using Stateless Servers                                                |
| 82229429     | Granted     | 7808005       | 4/26/2007   | 10/5/2010  | 11/789872          | US | LIGHT-EMITTING DEVICE WITH PHOTONIC GRATING CONFIGURED FOR EXTRACTING LIGHT FROM LIGHT-EMITTING STRUCTURE   |
| 82229480     | Granted     | 8565220       | 3/28/2008   | 10/22/2013 | 12/078260          | US | SIGNALING STATUS INFORMATION OF AN APPLICATION SERVICE                                                      |
| 82229534     | Granted     | 8064454       | 4/28/2008   | 11/22/2011 | 12/110411          | US | Protocol Incompatibility Detection                                                                          |

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| 82229588     | Granted     | 8369247       | 1/29/2008   | 2/5/2013   | 12/449241          | US | Method And System For Facilitating Multi-point Communications                 |
| 82229603     | Published   |               | 7/19/2007   |            | 11/779919          | US | Systems And Methods For Communicating With A Network Switch                   |
| 82229651     | Granted     | 9137103       | 4/30/2007   | 9/15/2015  | 11/796912          | US | Configuring Devices In A Secured Network                                      |
| 82229672     | Application |               | 7/31/2007   |            | 11/831763          | US | Systems And Methods For Scheduling Resources To Service Requests              |
| 82229780     | Granted     | 8554244       | 1/29/2008   | 10/8/2013  | 12/449246          | US | CONFIGURATION OF MOBILE COMMUNICATION DEVICES                                 |
| 82229789     | Granted     | 8209409       | 4/8/2008    | 6/26/2012  | 12/099685          | US | Diagnosis Of A Storage Area Network                                           |
| 82229795     | Granted     | 8453015       | 7/16/2008   | 5/28/2013  | 12/174194          | US | Memory Allocation For Crash Dump                                              |
| 82229846     | Granted     | 8265785       | 4/5/2007    | 41163      | 11/697193          | US | External Load Port Magazine And Storage System And Method Of Using Same       |
| 82229852     | Published   |               | 4/9/2008    |            | 12/100279          | US | Reconfiguring A Storage Area Network                                          |
| 82229855     | Granted     | 8111828       | 7/31/2007   | 2/7/2012   | 11/888044          | US | Management Of Cryptographic Keys For Securing Stored Data                     |
| 82229969     | Granted     | 8174977       | 7/6/2007    | 5/8/2012   | 11/825492          | US | END-TO-END FLOW CONTROL IN A NETWORK BACKGROUND                               |
| 82229984     | Granted     | 7876759       | 7/11/2007   | 1/25/2011  | 11/775967          | US | Quality Of Service With Control Flow Packet Filtering                         |
| 82229990     | Granted     | 8019910       | 7/31/2007   | 40799      | 11/831861          | US | Transaction Flow Control In PCI Express Fabric                                |
| 82230041     | Granted     | 8505091       | 4/30/2007   | 8/6/2013   | 11/742450          | US | Method Of Protecting Against Denial-of-service Attacks                        |
| 82230086     | Application |               | 7/11/2007   |            | 11/776064          | US | Systematic Approaches To Message Delivery                                     |
| 82230107     | Published   |               | 4/26/2007   |            | 11/796077          | US | INTELLIGENT RESOURCE MANAGEMENT IN MULTIPROCESSOR COMPUTER SYSTEMS            |
| 82230149     | Granted     | 8255903       | 7/3/2008    | 8/28/2012  | 12/167347          | US | Data Processing System And Method                                             |
| 82230158     | Granted     | 7602629       | 4/17/2007   | 10/13/2009 | 11/787588          | US | Content Addressable Memory                                                    |
| 82230173     | Allowed     |               | 1/30/2008   |            | 12/022486          | US | System And Methods For Distributed Output Packet Metering Using Input Lookups |
| 82230272     | Granted     | 8838558       | 8/8/2007    | 9/16/2014  | 11/891147          | US | Hash Lookup Table Method And Apparatus                                        |
| 82230299     | Granted     | 8005014       | 4/27/2007   | 8/23/2011  | 11/796419          | US | METHOD OF CHOOSING NODES IN A MULTI-NETWORK                                   |
| 82230335     | Granted     | 8799272       | 7/20/2007   | 8/5/2014   | 11/780843          | US | Data Skew Insensitive Parallel Join Scheme                                    |
| 82230341     | Application |               | 8/15/2007   |            | 11/839035          | US | Estimating An Operational Condition Of An Electronic Component                |
| 82230359     | Granted     | 8078704       | 4/12/2007   | 12/13/2011 | 11/786994          | US | PROVISIONING OF A SERVICE ENVIRONMENT USING WEB SERVICES                      |
| 82230467     | Granted     | 7603585       | 4/7/2007    | 10/13/2009 | 11/697717          | US | Systems And Methods For Updating Field Replaceable Units                      |
| 82230482     | Published   |               | 10/25/2007  |            | 12/671322          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                       |
| 82230485     | Granted     | 8781083       | 1/25/2007   | 7/15/2014  | 11/657845          | US | PAUSING CALL PROCESSING TO ENABLE THE PLAYBACK OF INFORMATION                 |
| 82230524     | Granted     | 8009992       | 6/11/2007   | 8/30/2011  | 11/811506          | US | Optical Interconnect                                                          |

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| 82230542     | Granted     | 8244134       | 6/19/2007   | 8/14/2012  | 11/820310          | US | Optical Interconnect                                                                                                                        |
| 82230647     | Granted     | 8907765       | 12/24/2007  | 12/9/2014  | 11/963982          | US | RFID Tag Detection Method And System                                                                                                        |
| 82230659     | Granted     | 7904476       | 7/30/2007   | 3/8/2011   | 11/888001          | US | COMPUTER-IMPLEMENTED METHOD FOR COMPRESSING REPRESENTATION OF BINARY RELATION                                                               |
| 82230662     | Application |               | 7/31/2007   |            | 11/888381          | US | Computer Implemented Method For Role Discovery In Access Control Systems                                                                    |
| 82230668     | Published   |               | 5/23/2008   |            | 12/125941          | US | A Method And A System To Determine Device Criticality During SAN Reconfigurations                                                           |
| 82230734     | Granted     | 9047202       | 4/30/2007   | 42157      | 11/799188          | US | Creating A Relationship Tree Representing Relationship Of Graphs To Enable Navigatin Through The Graphs Without Accessing An Input Data Set |
| 82230779     | Granted     | 7835900       | 4/27/2007   | 11/16/2010 | 11/741086          | US | Emulated Tape-based Storage Media                                                                                                           |
| 82230785     | Granted     | 8195189       | 7/23/2007   | 6/5/2012   | 11/781274          | US | Managing Of Items Distributed In A Global Supply Chain                                                                                      |
| 82230797     | Granted     | 8046767       | 4/30/2007   | 10/25/2011 | 11/742530          | US | System And Methods For Providing Capacity Management Of Resource Pools For Servicing Workloads                                              |
| 82230965     | Published   |               | 4/30/2007   |            | 11/742019          | US | Data Visualization Of A Datacenter                                                                                                          |
| 82230989     | Granted     | 7676280       | 4/30/2007   | 40246      | 11/796943          | US | Dynamic Environmental Management                                                                                                            |
| 82231151     | Granted     | 8151009       | 4/25/2007   | 4/3/2012   | 11/789545          | US | SERIAL CONNECTION EXTERNAL INTERFACE FROM PRINTED CIRCUIT BOARD TRANSLATION TO PARALLEL MEMORY PROTOCOL                                     |
| 82231154     | Granted     | 8102671       | 4/25/2007   | 1/24/2012  | 11/789632          | US | SERIAL CONNECTION EXTERNAL INTERFACE RISER CARDS AVOIDANCE OF ABUTMENT OF PARALLEL CONNECTION EXTERNAL INTERFACE MEMORY MODULES             |
| 82231175     | Granted     | 8904341       | 4/30/2007   | 12/2/2014  | 11/741878          | US | DERIVING GROUNDED MODEL OF BUSINESS PROCESS SUITABLE FOR AUTOMATIC DEPLOYMENT                                                               |
| 82231211     | Granted     | 7996602       | 4/30/2007   | 8/9/2011   | 11/796903          | US | Parallel Memory Device Rank Selection                                                                                                       |
| 82231214     | Granted     | 7711887       | 4/30/2007   | 5/4/2010   | 11/796790          | US | EMPLOYING A NATIVE FULLY BUFFERED DUAL IN-LINE MEMORY MODULE PROTOCOL TO WRITE PARALLEL PROTOCOL MEMORY MODULE CHANNELS                     |
| 82231217     | Application |               | 4/30/2007   |            | 11/796929          | US | Power Controller                                                                                                                            |
| 82231220     | Granted     | 8918496       | 4/30/2007   | 41996      | 11/742525          | US | System And Method For Generating Synthetic Workload Traces                                                                                  |
| 82231238     | Granted     | 8543711       | 4/30/2007   | 9/24/2013  | 11/742519          | US | System And Method For Evaluating A Pattern Of Resource Demands Of A Workload                                                                |
| 82231283     | Allowed     |               | 5/8/2007    |            | 11/745737          | US | ALLOCATION OF RESOURCES AMONG COMPUTER PARTITIONS USING PLURAL UTILIZATION PREDICTION ENGINES                                               |
| 82231286     | Granted     | 8312460       | 5/22/2007   | 41226      | 11/752231          | US | Allocating Computer Resources To Workloads Using Utilization Based Probability Distributions                                                |

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| 82231343     | Allowed     |               | 5/7/2007    |            | 11/7/45422         | US | In-processor Dynamic Address Redirection Table For Substituting Instruction Strings                                       |
| 82231475     | Granted     | 8316377       | 9/6/2007    | 11/20/2012 | 11/851306          | US | Sharing Legacy Devices In A Multi-host Environment                                                                        |
| 82231532     | Granted     | 7760506       | 6/6/2007    | 7/20/2010  | 11/758718          | US | Electronic Components, Systems And Apparatus With All Flow Devices                                                        |
| 82231601     | Granted     | 8130756       | 7/13/2007   | 40974      | 11/827742          | US | Tunnel Configuration                                                                                                      |
| 82231604     | Granted     | 8054833       | 6/5/2007    | 11/8/2011  | 11/810368          | US | Packet Mirroring                                                                                                          |
| 82231646     | Granted     | 7962480       | 7/31/2007   | 6/14/2011  | 11/831841          | US | Using A Weighted Tree To Determine Document Relevance                                                                     |
| 82231670     | Granted     | 8687975       | 10/23/2008  | 41730      | 12/933863          | US | Integrated Circuit With Optical Interconnect                                                                              |
| 82231718     | Granted     | 8689318       | 1/24/2008   | 4/1/2014   | 12/524563          | US | TRUSTED COMPUTING ENTITIES                                                                                                |
| 82231721     | Granted     | 7903655       | 4/19/2007   | 3/8/2011   | 11/788179          | US | Marked Packet Forwarding                                                                                                  |
| 82231724     | Granted     | 8151122       | 7/5/2007    | 4/3/2012   | 11/773759          | US | Power Budget Managing Method And System                                                                                   |
| 82231727     | Granted     | 8886917       | 4/25/2007   | 11/11/2014 | 11/789785          | US | SWITCHING TO CORE EXECUTING OS LIKE CODES UPON SYSTEM CALL READING GREATER THAN PREDETERMINED AMOUNT OF DATA (as amended) |
| 82231739     | Application |               | 6/7/2007    |            | 11/759914          | US | Computer System And Method For Delivering A Received Message With Low Latency                                             |
| 82231841     | Granted     | 8347005       | 7/31/2007   | 41275      | 11/882264          | US | MEMORY CONTROLLER WITH MULTI-PROTOCOL INTERFACE                                                                           |
| 82231844     | Granted     | 8230145       | 7/31/2007   | 41114      | 11/882265          | US | Memory Expansion Blade For Multiple Architectures                                                                         |
| 82231850     | Granted     | 7921363       | 4/30/2007   | 4/5/2011   | 11/796817          | US | Applying Data Thinning Processing To A Data Set For Visualization                                                         |
| 82231853     | Granted     | 8924843       | 4/30/2007   | 12/30/2014 | 11/796809          | US | Visualizing A Plurality Of Time Series In Corresponding Cell Based Lines Of A Display Region                              |
| 82231856     | Granted     | 7941742       | 4/30/2007   | 5/10/2011  | 11/796840          | US | Visualizing Growing Time Series Data In A Single View                                                                     |
| 82231901     | Published   |               | 7/7/2007    |            | 11/825351          | US | Networking With Remaining Battery Life Routing Metric                                                                     |
| 82231904     | Granted     | 7792990       | 4/30/2007   | 40428      | 11/796973          | US | Remote Client Remediation                                                                                                 |
| 82231910     | Granted     | 8850073       | 4/30/2007   | 9/30/2014  | 11/742549          | US | Data Mirroring Using Batch Boundaries                                                                                     |
| 82231913     | Granted     | 7797341       | 4/30/2007   | 9/14/2010  | 11/799212          | US | Desensitizing Database Information                                                                                        |
| 82231916     | Granted     | 8793264       | 7/18/2007   | 7/29/2014  | 11/879992          | US | Determining A Subset Of Documents From Which A Particular Document Was Derived                                            |
| 82232165     | Granted     | 8326970       | 11/5/2007   | 12/4/2012  | 11/935196          | US | System And Method For Modeling A Session-based System With A Transactions-based Analytic Model                            |
| 82232168     | Granted     | 8964746       | 2/15/2008   | 2/24/2015  | 12/032280          | US | Transmitting A Packet From A Distributed Trunk Switch                                                                     |
| 82232171     | Granted     | 7869714       | 8/8/2007    | 1/11/2011  | 11/835833          | US | Electronic System Having Free Space Optical Elements                                                                      |
| 82232210     | Granted     | 8909384       | 8/27/2007   | 41982      | 11/845231          | US | Computing Apparatus Operable Under Multiple Operational Policies                                                          |
| 82232336     | Granted     | 8127212       | 9/26/2007   | 2/28/2012  | 11/904284          | US | SYSTEM AND METHOD FOR DETERMINING THE FAULT TOLERANCE OF AN ERASURE CODE                                                  |

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| 82232414     | Granted | 8352957       | 1/31/2008   | 1/8/2013   | 12/012301          | US | Apparatus And Method For Passing Metadata In Stream Modules                                        |
| 82232477     | Granted | 7477809       | 7/31/2007   | 39826      | 11/831555          | US | Photonic Guiding Device                                                                            |
| 82232483     | Granted | 7835602       | 10/23/2008  | 11/16/2010 | 12/288884          | US | Photonic Guiding Device                                                                            |
| 82232543     | Granted | 7197559       | 10/19/2001  | 39168      | 10/038098          | US | Transaction Breakdown Feature To Facilitate Analysis Of Transaction Performance Of A Server System |
| 82232600     | Granted | 7903409       | 7/18/2007   | 3/8/2011   | 11/779624          | US | System And Method For Cooling An Electronic Device                                                 |
| 82232606     | Granted | 8799903       | 7/31/2007   | 8/5/2014   | 11/888349          | US | Systems And Methods For Exchanging Runtime Functionalities Between Software Stacks                 |
| 82232666     | Granted | 6341310       | 10/26/1998  | 1/22/2002  | 09/178707          | US | SYSTEM AND METHODS FOR FACILITATING THE VIEWING AND ANALYSIS OF WEB SITE USAGE DATA                |
| 82232675     | Granted | 5974572       | 10/14/1997  | 10/26/1999 | 08/949680          | US | SOFTWARE SYSTEM AND METHOD FOR GENERATING A LOAD TEST USING A SERVER ACCESS LOG                    |
| 82232711     | Granted | 6360332       | 6/21/1999   | 3/19/2002  | 09/337082          | US | SOFTWARE SYSTEM AND METHODS FOR TESTING THE FUNCTIONALITY OF A TRANSACTIONAL SERVER                |
| 82232720     | Granted | 8250302       | 10/1/2008   | 8/21/2012  | 12/243093          | US | SYSTEM FOR AN METHOD OF DATA CACHE MANAGEMENT                                                      |
| 82232777     | Granted | 8196610       | 7/26/2007   | 6/12/2012  | 11/881286          | US | Controlling Cooling Fluid Flow In A Cooling System With A Variable Orifice                         |
| 82232795     | Granted | 7783822       | 7/25/2007   | 8/24/2010  | 11/828042          | US | Systems And Methods For Improving Performance Of A Routable Fabric                                 |
| 82232858     | Granted | 6449739       | 1/17/2000   | 9/10/2002  | 09/484686          | US | POST-DEPLOYMENT MONITORING OF SERVER PERFORMANCE                                                   |
| 82232861     | Granted | 6564342       | 5/31/2002   | 5/13/2003  | 10/161460          | US | POST-DEPLOYMENT MONITORING OF SERVER PERFORMANCE                                                   |
| 82232900     | Granted | 7983135       | 10/16/2008  | 40743      | 12/253136          | US | OPTICAL SYSTEM WITH SUPERLENS                                                                      |
| 82232960     | Granted | 7823000       | 7/27/2007   | 10/26/2010 | 11/829128          | US | Measuring AC Power Consumption Using Choke With Inductive Power Sensor                             |
| 82232963     | Granted | 8756307       | 7/30/2007   | 6/17/2014  | 11/830586          | US | Translating Service Level Objectives To System Metrics                                             |
| 82232972     | Granted | 8537563       | 9/21/2007   | 9/17/2013  | 11/859601          | US | Memory System                                                                                      |
| 82233095     | Granted | 8135849       | 7/31/2007   | 3/13/2012  | 11/831756          | US | Server For Authenticating Clients Using File System Permissions                                    |
| 82233098     | Granted | 8965843       | 1/23/2008   | 2/24/2015  | 12/018323          | US | Prioritized Replication Paths                                                                      |
| 82233101     | Granted | 7895455       | 6/25/2007   | 40596      | 11/768102          | US | Dynamic Converter Control For Efficient Operation                                                  |
| 82233161     | Granted | 8166334       | 2/20/2008   | 4/24/2012  | 12/918050          | US | Redriver With Two Reference Clocks And Method Of Operation Thereof                                 |
| 82233167     | Granted | 8024514       | 7/17/2007   | 9/20/2011  | 11/879399          | US | ACCESS CONTROL MANAGEMENT                                                                          |
| 82233170     | Granted | 6477483       | 1/17/2000   | 11/5/2002  | 09/484684          | US | SERVICE FOR LOAD TESTING A TRANSACTIONAL SERVER OVER THE INTERNET                                  |
| 82233209     | Granted | 6754701       | 5/5/2000    | 6/22/2004  | 09/565832          | US | USE OF A SINGLE THREAD TO SUPPORT MULTIPLE NETWORK CONNECTIONS FOR SERVER LOAD TESTING             |

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| 82233230     | Granted   | 6973489       | 3/21/2000   | 12/6/2005  | 09/531821          | US | SERVER MONITORING VIRTUAL POINTS OF PRESENCE                                                                 |
| 82233284     | Granted   | 7692930       | 7/31/2007   | 4/6/2010   | 11/831377          | US | Low Profile Dirm Board                                                                                       |
| 82233299     | Published |               | 10/25/2007  |            | 12/671346          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                      |
| 82233335     | Granted   | 6738933       | 10/19/2001  | 5/18/2004  | 10/039271          | US | ROOT CAUSE ANALYSIS OF SERVER SYSTEM PERFORMANCE DEGRADATIONS                                                |
| 82233344     | Granted   | 9081627       | 7/31/2007   | 7/14/2015  | 11/831657          | US | Workload Management With Resource Transfer Sequence Planned As A Function Of Ranking Of Resource Allocations |
| 82233347     | Granted   | 7740209       | 7/27/2007   | 6/22/2010  | 11/878861          | US | CABLE ROUTING DEVICE                                                                                         |
| 82233398     | Granted   | 9021506       | 7/25/2007   | 4/28/2015  | 11/880957          | US | Resource Ejectability In Multiprocessor Systems                                                              |
| 82233401     | Granted   | 7984150       | 7/31/2007   | 7/19/2011  | 11/888269          | US | Cell Compatibility In Multiprocessor Systems                                                                 |
| 82233473     | Granted   | 8132088       | 8/14/2007   | 3/6/2012   | 11/838498          | US | DATA FORMATTING IN DATA STORAGE                                                                              |
| 82233476     | Granted   | 8340897       | 7/31/2007   | 12/25/2012 | 11/888190          | US | Providing Contemporaneous Maps To A User At A Non-GPS Enabled Mobile Device                                  |
| 82233584     | Granted   | 6633912       | 7/13/2001   | 10/14/2003 | 09/906946          | US | SYSTEM, METHOD AND APPARATUS FOR PROVIDING AN ENTERPRISE PORTAL                                              |
| 82233587     | Granted   | 7047277       | 7/13/2001   | 5/16/2006  | 09/905647          | US | SYSTEM AND COMPUTER-IMPLEMENTED METHOD FOR CREATING CONFIGURATION FILES FOR WEB TRANSACTION TESTS            |
| 82233593     | Granted   | 6631411       | 7/13/2001   | 10/7/2003  | 09/905672          | US | APPARATUS AND METHOD FOR MONITORING A CHAIN OF ELECTRONIC TRANSACTIONS                                       |
| 82233599     | Granted   | 5958008       | 4/11/1997   | 9/28/1999  | 08/837012          | US | SOFTWARE SYSTEM AND ASSOCIATED METHODS FOR SCANNING AND MAPPING DYNAMICALLY-GENERATED WEB DOCUMENTS          |
| 82233602     | Granted   | 6144962       | 4/11/1997   | 11/7/2000  | 08/843265          | US | VISUALIZATION OF WEB SITES AND HIERARCHICAL DATA STRUCTURES                                                  |
| 82233608     | Granted   | 6205122       | 4/2/1999    | 3/20/2001  | 09/285099          | US | AUTOMATIC NETWORK TOPOLOGY ANALYSIS                                                                          |
| 82233611     | Granted   | 6137782       | 6/17/1999   | 10/24/2000 | 09/334675          | US | AUTOMATIC NETWORK TRAFFIC ANALYSIS                                                                           |
| 82233731     | Granted   | 7651356       | 7/25/2007   | 1/26/2010  | 11/828319          | US | TAMPER-EVIDENT CONNECTOR                                                                                     |
| 82233908     | Granted   | 7925876       | 8/14/2007   | 4/12/2011  | 11/838298          | US | COMPUTER WITH EXTENSIBLE FIRMWARE INTERFACE IMPLEMENTING PARALLEL STORAGE-DEVICE ENUMERATION                 |
| 82233959     | Granted   | 8140637       | 9/26/2008   | 3/20/2012  | 12/239263          | US | DATA TRANSFER                                                                                                |
| 82233962     | Granted   | 7984236       | 9/13/2007   | 7/19/2011  | 11/854731          | US | DATA TRANSFER                                                                                                |
| 82234028     | Granted   | 7003781       | 5/5/2000    | 2/21/2006  | 09/564929          | US | Method And Apparatus For Correlation Of Events In A Distributed Multi-system Computing Environment           |
| 82234037     | Granted   | 7996853       | 10/4/2005   | 8/9/2011   | 11/243240          | US | Method And Apparatus For Correlation Of Events In A Distributed Multi-system Computing Environment           |
| 82234154     | Granted   | 7546017       | 9/28/2007   | 6/9/2009   | 11/904887          | US | Electro-phonic Modulators                                                                                    |

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| 82234157     | Granted   | 7489436       | 9/11/2007   | 2/10/2009  | 11/900347          | US | Hybrid Integrated Source Of Polarization-entangled Photons                                           |
| 82234283     | Granted   | 9002986       | 4/23/2007   | 4/7/2015   | 11/738719          | US | Systems And Methods For Sharing Customer Assets                                                      |
| 82234418     | Granted   | 7907530       | 9/20/2007   | 3/15/2011  | 11/917649          | US | Determining Link Costs                                                                               |
| 82234532     | Granted   | 7929865       | 7/27/2007   | 4/19/2011  | 11/881557          | US | Free Space WDM Signal Detector                                                                       |
| 82234598     | Granted   | 7835647       | 10/17/2007  | 11/16/2010 | 11/975228          | US | Method And System Of Tracking Optical Beam Shift                                                     |
| 82234649     | Granted   | 7895192       | 7/19/2007   | 2/22/2011  | 11/880392          | US | Estimating The Loaded Execution Runtime Of A Database Query                                          |
| 82234658     | Granted   | 7477441       | 7/24/2007   | 1/13/2009  | 11/881076          | US | MEMS Device With Nanowire Standoff Layer                                                             |
| 82234661     | Granted   | 7663202       | 6/26/2007   | 2/16/2010  | 11/819226          | US | Nanowire Photodiodes And Methods Of Making Nanowire Photodiodes                                      |
| 82234706     | Granted   | 7720342       | 10/31/2008  | 40316      | 12/262394          | US | Optical Device With A Graded Bandgap Structure And Methods Of Making And Using The Same              |
| 82234712     | Granted   | 7764850       | 10/1/2008   | 7/27/2010  | 12/243782          | US | OPTICAL MODULATOR INCLUDING ELECTRICALLY CONTROLLED RING RESONATOR                                   |
| 82234715     | Granted   | 7783145       | 10/15/2007  | 8/24/2010  | 11/872180          | US | Electrode Having Nanofilaments                                                                       |
| 82234718     | Granted   | 7630603       | 7/26/2007   | 12/8/2009  | 11/829042          | US | Optical Waveguide Ring Resonator With Photo-tunneling Input/output Port                              |
| 82234724     | Granted   | 8768132       | 10/16/2008  | 7/1/2014   | 12/253196          | US | Ridge Waveguide                                                                                      |
| 82234769     | Granted   | 7474811       | 9/14/2007   | 1/6/2009   | 11/856007          | US | Nanowire Photonic Apparatus Employing Optical Field Confinement                                      |
| 82234778     | Granted   | 8385698       | 12/12/2007  | 2/26/2013  | 12/743740          | US | CONTROLLABLE OPTICAL RING RESONATOR HAVING PERIODICALLY SPACED CONTROL ELECTRODES                    |
| 82234781     | Granted   | 7466881       | 7/13/2007   | 12/16/2008 | 11/827766          | US | Optical Switch                                                                                       |
| 82234784     | Granted   | 7751655       | 7/27/2007   | 7/6/2010   | 11/881679          | US | Micro-ring Optical Detector/modulator                                                                |
| 82234787     | Granted   | 8059922       | 5/26/2010   | 11/15/2011 | 12/787647          | US | METHODS OF MANIPULATING OPTICAL ENERGY WITHIN A WAVEGUIDE                                            |
| 82234793     | Granted   | 8044381       | 7/30/2007   | 10/25/2011 | 11/830601          | US | Light Emitting Diode (LED)                                                                           |
| 82234841     | Granted   | 7856437       | 7/31/2007   | 12/21/2010 | 11/888092          | US | Storing Nodes Representing Respective Chunks Of Files In A Data Store                                |
| 82234844     | Granted   | 8463787       | 10/25/2010  | 6/11/2013  | 12/911007          | US | Storing Nodes Representing Respective Chunks Of Files In A Data Store                                |
| 82234847     | Granted   | 7725437       | 7/31/2007   | 5/25/2010  | 11/888154          | US | Providing An Index For A Data Store                                                                  |
| 82234955     | Granted   | 7865389       | 7/19/2007   | 1/4/2011   | 11/879980          | US | Analyzing Time Series Data That Exhibits Seasonal Effects                                            |
| 82234970     | Granted   | 7764852       | 7/30/2007   | 7/27/2010  | 11/888015          | US | MICRORESONANTOR SYSTEMS AND METHODS OF FABRICATING THE SAME                                          |
| 82235021     | Granted   | 7765123       | 7/19/2007   | 7/27/2010  | 11/879979          | US | Indicating Which Of Forecasting Models At Different Aggregation Levels Has A Better Forecast Quality |
| 82235024     | Published |               | 7/20/2007   |            | 11/880284          | US | Providing A Model Of A Life Cycle Of An Enterprise Offering                                          |

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| 82235030     | Granted   | 8032033       | 10/23/2007  | 10/4/2011  | 11/977369          | US | Synchronous Optical Bus Providing Communication Between Computer System Components                                            |
| 82235084     | Granted   | 7921025       | 7/19/2007   | 4/5/2011   | 11/879977          | US | Building Market Models for Plural Market Participants                                                                         |
| 82235093     | Granted   | 7925805       | 10/24/2008  | 4/12/2011  | 12/258052          | US | Critical Resource Management                                                                                                  |
| 82235153     | Granted   | 8351204       | 1/31/2008   | 1/8/2013   | 12/864230          | US | MODULAR DATA PROCESSING COMPONENTS AND SYSTEMS                                                                                |
| 82235156     | Granted   | 8357980       | 10/15/2007  | 1/22/2013  | 11/974746          | US | Plasmonic High-speed Devices For Enhancing The Performance Of Microelectronic Devices                                         |
| 82235213     | Granted   | 8108582       | 10/13/2008  | 1/31/2012  | 12/249977          | US | Notifying Asynchronous Events To A Host Of A Data Storage System And Apparatus For The Same                                   |
| 82235216     | Granted   | 7765122       | 7/19/2007   | 7/27/2010  | 11/879924          | US | FORECASTING BASED ON A COLLECTION OF DATA INCLUDING AN INITIAL COLLECTION AND ESTIMATED ADDITIONAL DATA VALUES                |
| 82235222     | Allowed   |               | 6/27/2008   |            | 12/163208          | US | Access Control System And Method                                                                                              |
| 82235267     | Granted   | 7979742       | 7/19/2007   | 7/12/2011  | 11/880391          | US | [Improving] Recoverability Of A Dataset Associated With A Multi-tier Storage System (AMENDED)                                 |
| 82235330     | Granted   | 8505019       | 10/31/2008  | 8/6/2013   | 12/289680          | US | System And Method For Instant Capacity/workload Management Integration                                                        |
| 82235348     | Granted   | 8280974       | 7/31/2007   | 10/2/2012  | 11/831790          | US | Migrating Workloads Using Networked Attached Memory                                                                           |
| 82235354     | Published |               | 9/30/2008   |            | 12/242752          | US | Classifier Indexing                                                                                                           |
| 82235456     | Granted   | 8898558       | 9/29/2008   | 11/25/2014 | 12/240934          | US | Managing Multimodal Annotations Of An Image                                                                                   |
| 82235537     | Granted   | 8255915       | 10/26/2007  | 8/28/2012  | 11/924623          | US | Workload Management For Computer System With Container Hierarchy And Workload-group Policies                                  |
| 82235546     | Granted   | 8533041       | 9/29/2008   | 9/10/2013  | 12/286486          | US | Risk-and-return Based Advertisement Selection And Scheduling                                                                  |
| 82235582     | Granted   | 8024520       | 9/21/2007   | 9/20/2011  | 11/903384          | US | Maintaining Data Stored In A Memory Module When Transferring The Memory Module From A First Controller To A Second Controller |
| 82235648     | Granted   | 8959089       | 4/25/2008   | 2/17/2015  | 12/988365          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                       |
| 82235672     | Granted   | 8566835       | 10/31/2008  | 10/22/2013 | 12/263425          | US | Dynamically Resizing A Virtual Machine Container                                                                              |
| 82235708     | Granted   | 8447719       | 9/27/2008   | 5/21/2013  | 12/239755          | US | COMPLIATION OF CAUSAL RULES INTO CONTINUATIONS                                                                                |
| 82235726     | Granted   | 8914683       | 9/30/2008   | 12/16/2014 | 12/241866          | US | REPAIRING HIGH-SPEED SERIAL LINKS                                                                                             |
| 82235729     | Granted   | 8516221       | 10/31/2008  | 8/20/2013  | 12/263233          | US | On-the-fly TLB Coalescing                                                                                                     |
| 82235771     | Granted   | 8063738       | 9/11/2008   | 11/22/2011 | 12/208344          | US | RFID System With A Mobile RFID Reader                                                                                         |
| 82235777     | Granted   | 8053748       | 10/20/2008  | 11/8/2011  | 12/254607          | US | Integrated Circuits With Phase Change Devices                                                                                 |
| 82235780     | Published |               | 7/31/2009   |            | 12/533625          | US | System And Method For Providing Program Tracking Information                                                                  |
| 82235837     | Granted   | 8402511       | 7/30/2009   | 3/19/2013  | 12/512164          | US | IDAPI Communication Across OS Instances                                                                                       |
| 82235957     | Granted   | 8418974       | 2/20/2008   | 4/16/2013  | 12/918522          | US | Mounting Assembly For Rack Equipment                                                                                          |

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| 82236101     | Granted   | 8273983       | 10/3/2008   | 9/25/2012  | 12/244939          | US | PHOTONIC DEVICE AND METHOD OF MAKING SAME USING NANOWIRES                           |
| 82236233     | Granted   | 8432635       | 1/30/2008   | 4/30/2013  | 12/865399          | US | Servo Write Head Gap Width Correction                                               |
| 82236527     | Granted   | 8275578       | 9/25/2008   | 9/25/2012  | 12/238017          | US | DIAGNOSTICS FOR CENTRALLY MANAGED COMPUTER SYSTEM                                   |
| 82236662     | Granted   | 8254996       | 8/21/2008   | 41149      | 12/195435          | US | Systems And Methods For Managing Access Channels                                    |
| 82236668     | Granted   | 8046552       | 9/30/2008   | 10/25/2011 | 12/242087          | US | Tracking Metadata Changes During Data Copy In A Storage System                      |
| 82236776     | Granted   | 8046529       | 9/25/2008   | 10/25/2011 | 12/238177          | US | UPDATING CONTROL INFORMATION IN NON-VOLATILE MEMORY TO CONTROL SELECTION OF CONTENT |
| 82236899     | Granted   | 8030729       | 10/1/2008   | 10/4/2011  | 12/243804          | US | DEVICE FOR ABSORBING OR EMITTING LIGHT AND METHODS OF MAKING THE SAME               |
| 82236902     | Granted   | 8712035       | 1/31/2008   | 4/29/2014  | 12/012292          | US | ONLINE DATA CONVERSION TECHNIQUE USING A SLIDING WINDOW                             |
| 82237019     | Published |               | 12/20/2007  |            | 12/808229          | US | MODEL BASED DEPLOYMENT OF COMPUTER BASED BUSINESS PROCESS ON DEDICATED HARDWARE     |
| 82237034     | Granted   | 8982565       | 5/15/2008   | 3/17/2015  | 12/121350          | US | Toolless Configuration Of A Computer Enclosure                                      |
| 82237277     | Granted   | 8621470       | 1/24/2008   | 12/31/2013 | 12/019172          | US | WAKEUP-ATTRIBUTE-BASED ALLOCATION OF THREADS TO PROCESSORS                          |
| 82237598     | Granted   | 7924717       | 2/27/2009   | 40645      | 12/394466          | US | Systems And Methods Of Handling Access Control Violations                           |
| 82237607     | Granted   | 8289692       | 3/14/2008   | 10/16/2012 | 12/922411          | US | Blade Server For Increased Processing Capacity                                      |
| 82237658     | Granted   | 8161154       | 9/30/2008   | 4/17/2012  | 12/241435          | US | Establishing A Thin Client Terminal Services Session                                |
| 82237664     | Granted   | 8332877       | 1/30/2008   | 12/11/2012 | 12/022843          | US | Coordinated Actions Of Kernel And Userspace Components                              |
| 82237793     | Granted   | 8202047       | 5/7/2008    | 41079      | 12/116601          | US | Fan Module Latching Device                                                          |
| 82237841     | Granted   | 8065537       | 4/28/2008   | 11/22/2011 | 12/110575          | US | Adjusting Cap Settings Of Electronic Devices According To Measured Workloads        |
| 82237850     | Published |               | 4/19/2008   |            | 12/937930          | US | Device And Method For Cooling Fan Control Using Measured Amperage Load.             |
| 82237892     | Granted   | 7937273       | 9/27/2008   | 5/3/2011   | 12/239756          | US | Change Collision Calculation System And Method                                      |
| 82237901     | Published |               | 2/21/2008   |            | 12/918388          | US | Systems And Methods Of Component Voltage Adjustment                                 |
| 82237979     | Granted   | 7496646       | 9/20/2002   | 2/24/2009  | 10/251690          | US | System And Method For Management Of A Storage Area Network                          |
| 82238033     | Granted   | 7266722       | 9/20/2002   | 9/4/2007   | 10/251893          | US | SYSTEM AND METHOD FOR EFFICIENT LOCK RECOVERY                                       |
| 82238078     | Granted   | 8732706       | 10/20/2008  | 5/20/2014  | 12/254648          | US | Generating Governing Metrics For Resource Provisioning                              |
| 82238090     | Granted   | 7920560       | 4/23/2008   | 4/5/2011   | 12/108474          | US | Method For Detecting Topology Of Computer Systems                                   |
| 82238144     | Published |               | 1/30/2008   |            | 12/812937          | US | OPTICAL INTERCONNECTS                                                               |
| 82238150     | Granted   | 8306015       | 8/21/2008   | 11/6/2012  | 12/195448          | US | A Technique For Identifying RTP Based Traffic In Core Routing Switches              |

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| 82238264     | Published   |               | 9/21/2008   |            | 12/234678 US       | US | Capturing Application State Information For Simulation Managed Environments                            |
| 82238270     | Granted     | 8817817       | 5/15/2008   | 41877      | 12/121523 US       | US | Method For Ethernet Power Savings On Link Aggregated Groups                                            |
| 82238279     | Published   |               | 2/25/2009   |            | 12/392126 US       | US | Data Processing System And Method                                                                      |
| 82238285     | Published   |               | 11/21/2008  |            | 12/275232 US       | US | TASK-REGISTRATION-BASED USER AUTHORIZATION                                                             |
| 82238291     | Granted     | 7814759       | 5/19/2008   | 10/19/2010 | 12/153406 US       | US | Method For Controlling System Temperature                                                              |
| 82238339     | Granted     | 8761550       | 1/31/2008   | 6/24/2014  | 12/864228 US       | US | OPTICAL TAPS FOR CIRCUIT BOARD-MOUNTED OPTICAL WAVEGUIDES                                              |
| 82238348     | Granted     | 7656651       | 5/16/2008   | 2/2/2010   | 12/121933 US       | US | Apparatus And Methods For Automatically Positioning An Interface Module In A Rack System               |
| 82238408     | Granted     | 8161391       | 5/16/2008   | 4/17/2012  | 12/121968 US       | US | On-board Input And Management Device For A Computing System                                            |
| 82238456     | Published   |               | 10/1/2008   |            | 12/243022 US       | US | Server-embedded Distributed Storage System                                                             |
| 82238465     | Granted     | 7929919       | 9/25/2008   | 4/19/2011  | 12/237869 US       | US | SYSTEMS AND METHODS FOR A PLL-ADJUSTED REFERENCE CLOCK                                                 |
| 82238519     | Granted     |               | 5/15/2008   | 3/11/2014  | 12/121613 US       | US | Blade Device Enclosure                                                                                 |
| 82238531     | Granted     | 8122503       | 10/3/2008   | 2/21/2012  | 12/244974 US       | US | Methods And Systems For Managing A Potential Security Threat To A Network                              |
| 82238591     | Published   |               | 10/1/2008   |            | 12/243920 US       | US | Copying Logical Disk Mappings Between Arrays                                                           |
| 82238597     | Granted     | 8050021       | 5/16/2008   | 11/1/2011  | 12/122519 US       | US | Ejectable/retractable Interface Module For A Computer System                                           |
| 82238645     | Granted     | 8522002       | 1/28/2008   | 8/27/2013  | 12/811198 US       | US | SYSTEMS AND METHODS FOR DEPLOYMENT OF BOOT IMAGES IN DISKLESS SERVERS                                  |
| 82238660     | Published   |               | 12/20/2007  |            | 12/808227 US       | US | AUTOMATED MODEL GENERATION FOR COMPUTER BASED BUSINESS PROCESS                                         |
| 82238852     | Allowed     |               | 10/10/2008  |            | 12/249603 US       | US | Methods And Systems For Managing Security In A Network                                                 |
| 82238888     | Granted     | D588601       | 1/15/2008   | 3/17/2009  | 29/302351 US       | US | Bronco Front Bezel                                                                                     |
| 82238897     | Granted     | 7813120       | 6/13/2008   | 10/12/2010 | 12/138625 US       | US | Airflow Path Within An Electronic Module Enclosure                                                     |
| 82238903     | Granted     | 7755889       | 6/12/2008   | 7/13/2010  | 12/138186 US       | US | Air Manifold For Electronic Module Enclosure                                                           |
| 82238918     | Granted     | 8630739       | 3/14/2008   | 1/14/2014  | 12/921524 US       | US | Exergy Based Evaluation Of An Infrastructure                                                           |
| 82239029     | Published   |               | 10/1/2008   |            | 12/243051 US       | US | Classifying A Data Item With Respect To A Hierarchy Of Categories                                      |
| 82239077     | Published   |               | 2/29/2008   |            | 12/918389 US       | US | Identification Of Elements Of Currently-executing Component Script                                     |
| 82239326     | Granted     | 8332861       | 10/31/2008  | 41254      | 12/289681 US       | US | Virtualized Temporary Instant Capacity                                                                 |
| 82239329     | Application |               | 10/30/2008  |            | 12/289601 US       | US | Automatic Determination Of Workload Management Policy Settings                                         |
| 82239335     | Application |               | 9/30/2008   |            | 12/242589 US       | US | Predicting Performance Consequences Of Migrating An Application From First Hardware To Second Hardware |

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| 82239338     | Granted     | D598456       | 2/28/2008   | 8/18/2009  | 29/304300          | US | Front Bezel                                                                                                                                       |
| 82239341     | Granted     | D598457       | 2/28/2008   | 8/18/2009  | 29/304305          | US | Front Bezel                                                                                                                                       |
| 82239353     | Granted     | 8379544       | 1/23/2009   | 41324      | 12/359026          | US | COMMUNICATIONS                                                                                                                                    |
| 82239407     | Granted     | 9069613       | 9/30/2008   | 6/30/2015  | 12/242707          | US | Processing Batch Database Workload While Avoiding Overload                                                                                        |
| 82239413     | Granted     | 8148800       | 10/1/2008   | 41002      | 12/243182          | US | NANOWIRE-BASED SEMICONDUCTOR DEVICE AND METHOD EMPLOYING REMOVAL OF RESIDUAL CARRIERS                                                             |
| 82239467     | Granted     | 8368050       | 1/30/2008   | 2/5/2013   | 12/864210          | US | PLASMON ENHANCED LIGHT-EMITTING DIODES                                                                                                            |
| 82239515     | Granted     | 8009937       | 10/28/2008  | 40785      | 12/260006          | US | Charge-based Memory Cell For Optical Resonator Tuning                                                                                             |
| 82239527     | Granted     | 8693894       | 10/28/2008  | 41737      | 12/259985          | US | Gain Clamped Optical Device For Emitting LED Mode Light                                                                                           |
| 82239533     | Granted     | 7983519       | 10/16/2008  | 7/19/2011  | 12/253201          | US | PHOTONIC CONNECTION AND METHOD FOR ENHANCING ALIGNMENT ACCURACY THEREOF                                                                           |
| 82239539     | Granted     | 8392157       | 11/27/2007  | 3/5/2013   | 12/744898          | US | SYSTEM SYNTHESIS TO MEET AN EXERGY LOSS TARGET VALUE                                                                                              |
| 82239587     | Granted     | 8635593       | 9/30/2008   | 1/21/2014  | 12/241661          | US | Dynamic Autocompletion Tool                                                                                                                       |
| 82239641     | Application |               | 9/23/2008   |            | 12/236289          | US | Generating A Trace Identifying Activity Of A Computer System During The Execution Of An Application                                               |
| 82239650     | Granted     | 8897139       | 12/5/2008   | 41968      | 12/328961          | US | Packet Processing Indication                                                                                                                      |
| 82239659     | Application |               | 10/29/2008  |            | 12/260735          | US | Using A Virtual Machine To Acquire Information About Capabilities Of A Physical Machine                                                           |
| 82239665     | Granted     | 8910152       | 9/23/2008   | 12/9/2014  | 12/236304          | US | Migrating A Virtual Machine By Using A Hot-plug Event                                                                                             |
| 82239701     | Application |               | 10/29/2008  |            | 12/260762          | US | Controlling Access To Memory Using A Controller That Performs Cryptographic Functions                                                             |
| 82239707     | Application |               | 9/29/2008   |            | 12/240694          | US | Migrating A Virtual Machine Based On Information Relating To Communications Among Virtual Machines                                                |
| 82239716     | Granted     | 8341626       | 9/29/2008   | 12/25/2012 | 12/240611          | US | Migration Of A Virtual Machine In Response To Regional Environment Effects                                                                        |
| 82239722     | Granted     | 8181175       | 9/23/2008   | 5/15/2012  | 12/236196          | US | Accounting For Resource Usage Time By A Virtual Machine                                                                                           |
| 82239728     | Granted     | 8053982       | 10/1/2008   | 40855      | 12/243117          | US | LIGHT-EMITTING DIODES WITH CARRIER EXTRACTION ELECTRODES                                                                                          |
| 82239764     | Granted     | 8185894       | 9/24/2008   | 41051      | 12/237177          | US | Training A Virtual Machine Placement Controller                                                                                                   |
| 82239770     | Granted     | 8365169       | 9/23/2008   | 1/29/2013  | 12/236244          | US | Migrating A Virtual Machine Across Processing Cells Connected To An Interconnect That Provides Data Communication Without Cache Coherency Support |
| 82239776     | Granted     | 8542960       | 10/31/2008  | 9/24/2013  | 12/262419          | US | Tunable Ring Resonator                                                                                                                            |
| 82239827     | Granted     | 8732308       | 10/1/2008   | 5/20/2014  | 12/243111          | US | Coordinated Management In Virtualized Systems Using Management Brokers And Management Channels                                                    |
| 82239848     | Granted     | 7941015       | 10/30/2008  | 5/10/2011  | 12/262142          | US | Ring Light Emitting Diode                                                                                                                         |
| 82239854     | Granted     | 7863625       | 9/30/2008   | 40547      | 12/242559          | US | Nanowire-based Light-emitting Diodes And Light-detection Devices With Nanocrystalline Outer Surface                                               |

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| 82239893     | Allowed   |               | 10/1/2008   |            | 12/243896          | US | Access Grants                                                                                                                                                                 |
| 82239899     | Granted   | 8627111       | 10/1/2008   | 1/7/2014   | 12/243903          | US | Managing Associations Between Keys And Values                                                                                                                                 |
| 82240076     | Granted   | 8255917       | 9/25/2008   | 41149      | 12/238074          | US | Auto-configuring Workload Management System                                                                                                                                   |
| 82240079     | Allowed   |               | 10/28/2008  |            | 12/259992          | US | UPDATING A COMPUTER SYSTEM                                                                                                                                                    |
| 82240085     | Granted   | 8037350       | 10/13/2008  | 10/11/2011 | 12/250367          | US | Altering A Degree Of Redundancy Used During Execution Of An Application                                                                                                       |
| 82240094     | Granted   | 8427478       | 10/28/2008  | 4/23/2013  | 12/290252          | US | Displaying Continually Incoming Time Series Data That Uses Overwriting Of One Portion Of The Time Series Data While Another Portion Of The Time Series Data Remains Unshifted |
|              |           |               |             |            |                    |    |                                                                                                                                                                               |
| 82240100     | Published |               | 10/28/2008  |            | 12/290322          | US | Non-overlapping Visualization Of Data Records Of A Scatter Plot                                                                                                               |
| 82240202     | Granted   | 9141687       | 10/1/2008   | 9/22/2015  | 12/243075          | US | Identification Of Data Objects Within A Computer Database                                                                                                                     |
| 82240205     | Granted   | 8892910       | 12/17/2008  | 11/18/2014 | 12/316819          | US | Method And System For Providing Dynamic Power Sharing To Network Devices                                                                                                      |
| 82240217     | Granted   | 7840669       | 9/30/2008   | 11/23/2010 | 12/241799          | US | PROVISIONING ARTIFACTS FOR POLICY ENFORCEMENT OF SERVICE-ORIENTED ARCHITECTURE (SOA) DEPLOYMENTS                                                                              |
| 82240223     | Granted   | 7979739       | 8/21/2008   | 7/12/2011  | 12/195440          | US | Systems And Methods For Managing A Redundant Management Module                                                                                                                |
| 82240229     | Granted   | 9143494       | 11/14/2008  | 9/22/2015  | 12/271581          | US | Method And Apparatus For Accessing A Network                                                                                                                                  |
| 82240268     | Granted   | 8726045       | 3/31/2008   | 5/13/2014  | 12/935125          | US | Automated Power Topology Discovery By Detecting Communication Over Power Line And Associating PDU Port Identifier To Computing Device                                         |
| 82240352     | Granted   | 8116815       | 8/21/2008   | 2/14/2012  | 12/195428          | US | Systems And Methods For Maintaining Base Stations In Wireless Networks                                                                                                        |
| 82240388     | Granted   | 9072202       | 10/12/2007  | 6/30/2015  | 11/871485          | US | Systems And Methods For Cleaning Filters Of An Electrical Device                                                                                                              |
| 82240391     | Granted   | 8121807       | 10/15/2008  | 40960      | 12/288021          | US | Method And System For Device Reconfiguration For Defect Amelioration                                                                                                          |
| 82240469     | Published |               | 9/25/2008   |            | 12/237695          | US | Management Of A Service Performing Structure                                                                                                                                  |
| 82240520     | Granted   | 8362894       | 10/30/2009  | 41303      | 12/609481          | US | Methods And Systems For Providing Departure Notification From A Travel Assistance System                                                                                      |
| 82240577     | Published |               | 2/26/2008   |            | 12/919126          | US | Fan And Cooling Device                                                                                                                                                        |
| 82240598     | Granted   | 8199432       | 9/30/2008   | 41072      | 12/241995          | US | Extended Tape Path Length Between Nip Point And Guide In Tape Drive                                                                                                           |
| 82240661     | Granted   | 8464086       | 3/3/2008    | 41436      | 12/920575          | US | Software-Based Power Capping                                                                                                                                                  |
| 82240724     | Granted   | 8626355       | 4/1/2008    | 1/7/2014   | 12/935985          | US | Cooling Provisioning Management In A Three Dimensional Package                                                                                                                |

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| 82240835     | Published |               | 4/30/2008   |            | 12/937938          | US | POWER SUPPLY ASSEMBLY FOR SERVER RACK AND METHOD FOR MOUNTING POWER SUPPLY FOR SERVER RACK                   |
| 82240844     | Granted   | 8355251       | 8/21/2008   | 1/15/2013  | 12/195425          | US | Remote Exhaust For Rack Systems                                                                              |
| 82240964     | Published |               | 4/8/2009    |            | 12/937127          | US | DATA PROCESSING SYSTEM AND METHOD                                                                            |
| 82241087     | Granted   | 8307417       | 2/13/2009   | 11/6/2012  | 12/370608          | US | Port Enablement                                                                                              |
| 82241150     | Granted   | 8199671       | 9/30/2008   | 6/12/2012  | 12/241728          | US | Throttling Network Traffic Generated By A Network Discovery Tool During A Discovery Scan                     |
| 82241207     | Granted   | 8650579       | 10/29/2007  | 2/11/2014  | 11/927083          | US | Containment For Computer-software Update Installation Processes                                              |
| 82241282     | Published |               | 6/2/2008    |            | 12/131395          | US | Multiplexing Reserved Ports                                                                                  |
| 82241288     | Granted   | 8924794       | 2/21/2008   | 12/30/2014 | 12/867445          | US | Method And Computer Program Product For Forecasting System Behavior                                          |
| 82241339     | Granted   | 8180744       | 10/1/2008   | 41044      | 12/243103          | US | Managing Storage Of Data In A Data Structure                                                                 |
| 82241387     | Granted   | 8260101       | 10/31/2008  | 9/4/2012   | 12/263384          | US | System And Method For An In-plane Hollow Metal Waveguide Optical Power Beam Splitter                         |
| 82241453     | Granted   | 8595405       | 2/18/2008   | 11/26/2013 | 12/867462          | US | Systems And Methods Of Communicatively Coupling A Host Computing Device And A Peripheral Device              |
| 82241474     | Granted   | 8423698       | 4/2/2008    | 41380      | 12/935541          | US | CONVERSION OF RESETS SENT TO A SHARED DEVICE                                                                 |
| 82241516     | Published |               | 10/31/2008  |            | 12/263080          | US | Graphic For Network Switches                                                                                 |
| 82241528     | Granted   | 8373061       | 10/28/2008  | 2/12/2013  | 12/259969          | US | Photovoltaic Cells With Stacked Light-absorption Layers And Methods Of Fabricating The Same                  |
| 82241645     | Granted   | 8392383       | 9/26/2008   | 41338      | 12/239433          | US | System And Method For Recording Files Of Data                                                                |
| 82241663     | Granted   | 8694991       | 8/22/2008   | 4/8/2014   | 12/935152          | US | Server Virtualized Using Virtualization Platform                                                             |
| 82241720     | Granted   | 8972410       | 5/11/2009   | 3/3/2015   | 12/463972          | US | Identifying Related Objects In A Computer Database                                                           |
| 82241726     | Granted   | 8620859       | 6/10/2008   | 12/31/2013 | 12/136075          | US | DATA PROCESSING SYSTEM AND METHOD OF EVALUATING EFFECTIVENESS OF USAGE OF A FILE SYSTEM (as amended)         |
| 82241786     | Allowed   |               | 11/21/2007  |            | 11/986599          | US | Allocation Of Resources For Concurrent Query Execution Via Adaptive Segmentation                             |
| 82241843     | Granted   | 8555048       | 9/25/2008   | 10/8/2013  | 12/238092          | US | COMPUTER SYSTEM FOR BOOTING A SYSTEM IMAGE BY ASSOCIATING INCOMPLETE IDENTIFIERS TO COMPLETE IDENTIFIERS VIA |
| 82241852     | Granted   | 9008467       | 10/31/2008  | 4/14/2015  | 12/262312          | US | QUERYING STORAGE LOCATIONS ACCORDING TO PRIORITY LEVEL WHERE THE QUERYING IS SELF ADJUSTING                  |
| 82241897     | Granted   | 8390800       | 3/4/2008    | 3/5/2013   | 12/864234          | US | Nanoparticle-based Quantum Confined Stark Effect Modulator                                                   |
| 82241903     | Granted   | 8390005       | 10/1/2008   | 3/5/2013   | 12/243105          | US | ANGLE SENSOR, SYSTEM AND METHOD EMPLOYING GUIDED-MODE RESONANCE                                              |
|              |           |               |             |            |                    |    | Apparatus And Method For Nanowire Optical Emission                                                           |

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| 82241969     | Granted   | 8392633       | 10/1/2008   | 3/5/2013   | 12/243216          | US | Scheduling Requesters Of A Shared Storage Resource                                                                                 |
| 82242095     | Published |               | 2/15/2008   |            | 12/867107          | US | METHOD AND COMPUTER PROGRAM PRODUCT FOR CHANGING AN IT SYSTEM                                                                      |
| 82242224     | Granted   | 8693814       | 3/28/2008   | 4/8/2014   | 12/922092          | US | FLEXIBLE OPTICAL INTERCONNECT                                                                                                      |
| 82242269     | Granted   | 8250427       | 10/1/2008   | 41142      | 12/243471          | US | Selecting Erasure Codes For A Fault Tolerant System                                                                                |
| 82242275     | Granted   | 8488267       | 6/6/2008    | 7/16/2013  | 12/993796          | US | Sensor Position Adjustment With Media Velocity Relative Sample Timing                                                              |
| 82242281     | Granted   | 8843877       | 11/17/2008  | 9/23/2014  | 12/272485          | US | Integrated SOA Deployment And Management System And Method For Software Services                                                   |
| 82242287     | Granted   | 8233804       | 9/30/2008   | 7/31/2012  | 12/241945          | US | Fiber Optic Cable Diagnostics Using Digital Modulation                                                                             |
| 82242389     | Granted   | 7990812       | 10/1/2008   | 40757      | 12/243368          | US | STORAGE SYSTEMS AND METHODS FOR PUBLISHING DEVICE ADDRESSES                                                                        |
| 82242395     | Granted   | 8055954       | 10/1/2008   | 11/8/2011  | 12/243340          | US | Storage Systems And Methods For Distributed Support Ticket Processing                                                              |
| 82242509     | Granted   | 9122724       | 10/28/2008  | 42248      | 12/260053          | US | COMBINED JOIN                                                                                                                      |
| 82242584     | Granted   | 8938139       | 3/11/2008   | 1/20/2015  | 12/921768          | US | Optoelectronic Switches Using On-chip Optical Waveguides                                                                           |
| 82242593     | Granted   | 8229596       | 9/25/2008   | 7/24/2012  | 12/238281          | US | Systems And Methods To Interface Diverse Climate Controllers And Cooling Devices                                                   |
| 82242602     | Granted   | 8200969       | 1/31/2008   | 6/12/2012  | 12/012293          | US | Data Verification By Challenge                                                                                                     |
| 82242644     | Granted   | 8660432       | 4/2/2008    | 41695      | 12/922098          | US | IMAGE-ROTATION PRISMS AND OPTICAL INTERCONNECTS EMPLOYING THE SAME                                                                 |
| 82242662     | Granted   | 8174769       | 4/4/2008    | 5/8/2012   | 12/922095          | US | BEAMSPLITTERS WITH OFFSET COMPENSATION                                                                                             |
| 82242719     | Published | 8370834       | 5/1/2008    | 2/5/2013   | 12/989981          | US | Storing Checkpoint Data In Non-volatile Memory                                                                                     |
| 82242725     | Granted   | 8032493       | 3/9/2009    | 10/4/2011  | 12/400491          | US | Routing Across A Virtual Network                                                                                                   |
| 82242767     | Granted   |               | 9/26/2008   |            | 12/239034          | US | System And Method Of Obtaining Interrelated Data In A Database                                                                     |
| 82242845     | Published |               | 10/30/2008  |            | 12/262017          | US | AN ARCHITECTURE FOR INSTANTIATING INFORMATION TECHNOLOGY SERVICES                                                                  |
| 82242848     | Granted   | 8375396       | 1/31/2008   | 41317      | 12/012291          | US | Backup Procedure With Transparent Load Balancing                                                                                   |
| 82242893     | Published |               | 10/21/2008  |            | 12/255608          | US | Method For Database Design                                                                                                         |
| 82242902     | Granted   | 8396883       | 6/23/2008   | 3/12/2013  | 12/994314          | US | Spatial Querying In A Data Warehouse                                                                                               |
| 82242950     | Published |               | 9/30/2008   |            | 12/242678          | US | Characterizing Queries To Predict Execution In A Database                                                                          |
| 82243010     | Published |               | 10/28/2008  |            | 12/290281          | US | Automated Visual Analysis Of Nearby Markings Of A Visualization To Perform Relationship Determination And Exception Identification |
| 82243016     | Allowed   |               | 9/30/2008   |            | 12/242616          | US | Predicting Performance Of Multiple Queries Executing In A Database                                                                 |
| 82243082     | Granted   | 8009499       | 10/1/2008   | 40785      | 12/243857          | US | Providing A Capacitor-based Power Supply To Enable Backup Copying Of Data From Volatile Storage To Persistent Storage              |

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| 82243097     | Granted     | 8019765       | 10/29/2008  | 9/13/2011  | 12/260836          | US | Identifying Files Associated With A Workflow                                                                    |
| 82243100     | Granted     | 8306947       | 10/30/2008  | 11/6/2012  | 12/261473          | US | REPLICATION OF OPERATIONS ON OBJECTS DISTRIBUTED IN STORAGE SYSTEM                                              |
| 82243226     | Published   |               | 9/26/2008   |            | 12/239316          | US | System And Method For Generating Messages                                                                       |
| 82243409     | Allowed     |               | 3/9/2009    |            | 12/400526          | US | Distributed Network Connection Policy Management                                                                |
| 82243451     | Published   |               | 9/23/2008   |            | 12/236186          | US | System And Method For Distributing Enduring Credentials In An Untrusted Network Environment                     |
| 82243508     | Granted     | D625252       | 12/5/2007   | 40463      | 29/298475          | US | Modular Power Supply (as Amended)                                                                               |
| 82243574     | Granted     | 8126696       | 10/15/2008  | 2/28/2012  | 12/252121          | US | Modifying Length Of Synchronization Quanta Of Simulations Time In Which Execution Of Nodes Is Simulated         |
| 82243637     | Granted     | 6751702       | 10/31/2000  | 6/15/2004  | 09/699347          | US | Method For Automated Provisioning Of Central Data Storage Devices Using A Data Model                            |
| 82243643     | Granted     | 6816897       | 4/30/2001   | 11/9/2004  | 09/843813          | US | Console Mapping Tool For Automated Deployment And Management Of Network Devices                                 |
| 82243646     | Granted     | 7855888       | 1/13/2009   | 12/21/2010 | 12/352907          | US | Cooling Manifold Assembly                                                                                       |
| 82243655     | Granted     | 8903985       | 10/13/2009  | 12/2/2014  | 12/578019          | US | SHARING STATUS INFORMATION ACROSS A PLURALITY OF COMMUNICATION NETWORKS                                         |
| 82243661     | Application |               | 9/30/2008   |            | 12/242610          | US | Managing A Payment Transaction                                                                                  |
| 82243706     | Published   |               | 6/17/2008   |            | 12/140281          | US | Data Processing System And Method                                                                               |
| 82243712     | Granted     | 8122069       | 10/21/2008  | 2/21/2012  | 12/255619          | US | Methods For Paining Text Snippets To File Activity                                                              |
| 82243718     | Granted     | 7953752       | 10/30/2008  | 5/31/2011  | 12/261665          | US | Methods For Merging Text Snippets For Context Classification                                                    |
| 82243766     | Published   |               | 5/27/2009   |            | 12/472584          | US | INFORMATION SHARING METHOD AND APPARATUS                                                                        |
| 82244141     | Granted     | 8489831       | 10/1/2008   | 7/16/2013  | 12/243193          | US | Systems And Methods For Data Snapshot Replication                                                               |
| 82244147     | Granted     | 8798960       | 10/29/2008  | 8/5/2014   | 12/260771          | US | Application Performance Analysis For A Multiple Processor Queuing Station                                       |
| 82244150     | Granted     | 6763361       | 10/31/2000  | 7/13/2004  | 09/699348          | US | Object-oriented Database Abstraction And Statement Generation                                                   |
| 82244156     | Granted     | 6658426       | 10/31/2000  | 37957      | 09/699349          | US | Object-oriented Database Abstraction And Statement Generation                                                   |
| 82244162     | Granted     | 7152109       | 4/20/2001   | 12/19/2006 | 09/838141          | US | AUTOMATED PROVISIONING OF COMPUTING NETWORKS ACCORDING TO CUSTOMER ACCOUNTS USING A NETWORK DATABASE DATA MODEL |
| 82244195     | Granted     | 8762507       | 12/22/2006  | 6/24/2014  | 11/644366          | US | Method And System For Managing An Information Technology System                                                 |
| 82244204     | Published   |               | 10/2/2008   |            | 12/244096          | US | Distributed Sensor System                                                                                       |
| 82244261     | Granted     | 7437437       | 4/25/2001   | 10/14/2008 | 09/841008          | US | Access Authentication For Distributed Networks                                                                  |
| 82244264     | Granted     | 7818414       | 8/4/2008    | 40470      | 12/185701          | US | Access Authentication For Distributed Networks                                                                  |
| 82244267     | Granted     | 7496645       | 10/18/2001  | 2/24/2009  | 09/978710          | US | Deployment Of Business Logic Software And Data Content Onto Network Servers                                     |

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| 82244273     | Granted   | 8019835       | 4/20/2001   | 40799      | 09/838135          | US | Automated Provisioning Of Computing Networks Using A Network Data Model                                                   |
| 82244324     | Granted   | 6996845       | 11/28/2000  | 38755      | 09/722655          | US | Internet Security Analysis System And Process                                                                             |
| 82244327     | Granted   | 7200867       | 2/7/2006    | 39175      | 11/348416          | US | Webcrawl Internet Security Analysis And Process                                                                           |
| 82244330     | Granted   | 7444680       | 4/2/2007    | 10/28/2008 | 11/695147          | US | Webcrawl Internet Security Analysis And Process                                                                           |
| 82244342     | Granted   | 7647631       | 12/7/2004   | 1/12/2010  | 11/007713          | US | Automated User Interaction In Application Assessment                                                                      |
| 82244348     | Granted   | 8566945       | 2/11/2005   | 10/22/2013 | 11/056928          | US | System And Method For Testing Web Applications With Recursive Discovery And Analysis                                      |
| 82244390     | Granted   | 8656495       | 11/17/2006  | 41688      | 11/560969          | US | Web Application Assessment Based On Intelligent Generation Of Attack Strings                                              |
| 82244399     | Published |               | 11/17/2006  |            | 11/560984          | US | Characterization Of Web Application Inputs                                                                                |
| 82244465     | Granted   | 8127122       | 9/16/2008   | 40967      | 12/211202          | US | Boot Drive Selection                                                                                                      |
| 82244519     | Granted   | 8463880       | 3/24/2008   | 6/11/2013  | 12/079014          | US | Method And System For Removing A Tunnel Between Portal Points                                                             |
| 82244525     | Granted   | 8205134       | 9/30/2008   | 6/19/2012  | 12/286492          | US | Error Detection Method And Apparatus                                                                                      |
| 82244570     | Granted   | 8332340       | 5/22/2008   | 12/11/2012 | 12/743781          | US | HYBRID MICROSCALE-NANOSCALE NEUROMORPHIC INTEGRATED CIRCUIT                                                               |
| 82244576     | Granted   | 9063947       | 10/24/2008  | 6/23/2015  | 12/258316          | US | Detecting Duplicative Hierarchical Sets Of Files                                                                          |
| 82244582     | Granted   | 9143554       | 10/13/2008  | 9/22/2015  | 12/250256          | US | CONTROL OF A COMPUTING SYSTEM HAVING ADJUSTABLE INPUTS                                                                    |
| 82244585     | Allowed   |               | 6/11/2009   |            | 12/482475          | US | Apparatus And Method For Email Storage                                                                                    |
| 82244594     | Granted   | 7958022       | 6/17/2008   | 40701      | 12/140287          | US | Pre-pay Communication Services                                                                                            |
| 82244645     | Granted   | 8789039       | 9/26/2008   | 41842      | 12/239373          | US | Method And System Of Installing A Program On A First Computer, And Duplicating The Installation On A Second Computer      |
| 82244654     | Granted   | 8190555       | 1/30/2009   | 5/29/2012  | 12/322263          | US | METHOD AND SYSTEM FOR COLLECTING AND DISTRIBUTING USER-CREATED CONTENT WITHIN A DATA-WAREHOUSE-BASED COMPUTATIONAL SYSTEM |
| 82244759     | Granted   | 7881228       | 9/9/2008    | 2/1/2011   | 12/206753          | US | SYSTEM AND METHOD FOR BROADCAST PRUNING IN ETHERNET BASED PROVIDER BRIDGING NETWORK                                       |
| 82244771     | Published |               | 10/23/2008  |            | 12/257232          | US | Apparatus And Method For Recording Video Data                                                                             |
| 82244783     | Published |               | 10/27/2008  |            | 12/258741          | US | GENERATING A QUERY PLAN FOR ESTIMATING A NUMBER OF UNIQUE ATTRIBUTES IN A DATABASE                                        |
| 82244843     | Granted   | 8429216       | 9/23/2008   | 4/23/2013  | 12/235905          | US | Generating A Hash Value From A Vector Representing A Data Object                                                          |
| 82244894     | Granted   | 8843354       | 6/19/2008   | 9/23/2014  | 12/990463          | US | Capacity Planning                                                                                                         |
| 82244963     | Granted   | 7924520       | 10/1/2008   | 4/12/2011  | 12/243208          | US | Method And Apparatus For Determining Position Of A Storage Medium                                                         |
| 82244969     | Published |               | 10/24/2008  |            | 12/257440          | US | CUSTOMIZING PRODUCTS                                                                                                      |
| 82245014     | Published |               | 12/12/2008  |            | 12/316412          | US | Workload Management In A Parallel Database System                                                                         |

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| 82245017     | Granted   | 7974943       | 10/30/2008  | 40729      | 12/261055          | US | Building A Synchronized Target Database                                                                         |
| 82245203     | Granted   | 8156063       | 9/29/2008   | 4/10/2012  | 12/240593          | US | DECISION MAKING BASED ON CHANGES INPUT TO A DATABASE                                                            |
| 82245221     | Granted   | 8918670       | 10/29/2008  | 12/23/2014 | 12/260609          | US | Active Link Verification For Failover Operations In A Storage Network                                           |
| 82245269     | Published |               | 10/23/2008  |            | 12/256586          | US | Detecting Potentially Unauthorized Objects Within An Enterprise                                                 |
| 82245341     | Published |               | 10/9/2008   |            | 12/248648          | US | Cross-layer Power Management In A Multi-layer System                                                            |
| 82245386     | Granted   | 7741867       | 10/30/2008  | 6/22/2010  | 12/262051          | US | DIFFERENTIAL ON-LINE TERMINATION                                                                                |
| 82245410     | Granted   | 8131814       | 10/15/2008  | 3/6/2012   | 12/252173          | US | Dynamic Pinning Remote Direct Memory Access                                                                     |
| 82245515     | Granted   | 8565218       | 10/31/2008  | 10/22/2013 | 12/263429          | US | Flow Path Discovery In Network To Guarantee Multiple Metric Qos Constraints                                     |
| 82245518     | Published |               | 10/30/2008  |            | 12/261761          | US | Filter Generation For Load Testing Managed Environments                                                         |
| 82245578     | Published |               | 7/3/2008    |            | 12/993926          | US | Memory Server                                                                                                   |
| 82245635     | Granted   | 8543005       | 4/30/2008   | 9/24/2013  | 12/990494          | US | Intentionally Skewed Optical Clock Signal Distribution                                                          |
| 82245644     | Published |               | 10/14/2008  |            | 12/251259          | US | Prioritizing Problems In IT Services                                                                            |
| 82245695     | Granted   | 8180751       | 10/31/2008  | 5/15/2012  | 12/263414          | US | Using An Encyclopedia To Build User Profiles                                                                    |
| 82245704     | Granted   | 8094582       | 4/7/2009    | 1/10/2012  | 12/419633          | US | Location Determination For Placing A New Capacity Point In A Wireless Network                                   |
| 82245707     | Granted   | 8228912       | 4/30/2009   | 7/24/2012  | 12/433807          | US | Selecting Wireless Mesh Node Locations                                                                          |
| 82245710     | Granted   | 8018753       | 10/30/2008  | 9/13/2011  | 12/262038          | US | MEMORY MODULE INCLUDING VOLTAGE SENSE MONITORING INTERFACE                                                      |
| 82245719     | Granted   | 7930593       | 10/1/2008   | 4/19/2011  | 12/243262          | US | Segment Based Technique And System For Detecting Performance Anomalies And Changes For A Computer Based Service |
| 82245911     | Published |               | 10/14/2008  |            | 12/250881          | US | Scheduling Queries Using A Stretch Metric                                                                       |
| 82246022     | Published |               | 9/30/2008   |            | 12/242186          | US | Reduced-resource Block Thin Provisioning                                                                        |
| 82246325     | Granted   | 8140461       | 3/24/2008   | 3/20/2012  | 12/079021          | US | System And Method For Identifying Conflicting Network Access Rules And Creating A Resolved Consequence          |
| 82246406     | Published |               | 6/30/2009   |            | 12/495628          | US | QUERY PROGRESS ESTIMATION BASED ON PROCESSED VALUE PACKETS                                                      |
| 82246448     | Granted   | 8234459       | 3/13/2009   | 7/31/2012  | 12/403712          | US | SWITCH MODULE BASED NON-VOLATILE MEMORY IN A SERVER                                                             |
| 82246451     | Granted   | 8176293       | 3/27/2009   | 5/8/2012   | 12/383766          | US | Method And System For Moving Active Virtual Partitions Between Computers                                        |
| 82246472     | Granted   | 7965914       | 10/30/2008  | 40715      | 12/262160          | US | CRITICALLY COUPLED MICRORING RESONATOR AND METHOD                                                               |
| 82246568     | Granted   | 7974219       | 9/26/2008   | 40729      | 12/232966          | US | Network Troubleshooting Using Path Topology                                                                     |
| 82246592     | Granted   | 8892492       | 12/17/2008  | 11/18/2014 | 12/336667          | US | Declarative Network Access Control                                                                              |
| 82246697     | Granted   | D607349       | 10/28/2008  | 1/5/2010   | 29/326971          | US | Sensor And LED Enclosure                                                                                        |

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| 82246772     | Granted     | 8566332       | 3/2/2009    | 10/22/2013 | 12/396430          | US | Populating Variable Content Slots On Web Pages                                                                                                             |
| 82246775     | Granted     | 8255185       | 10/15/2008  | 41149      | 12/252355          | US | Automated Information Technology Management                                                                                                                |
| 82246889     | Granted     | 8875142       | 10/23/2009  | 41940      | 12/604568          | US | JOB SCHEDULING ON A MULTIPROCESSING SYSTEM BASED ON RELIABILITY AND PERFORMANCE RANKINGS OF PROCESSORS AND WEIGHTED EFFECT OF DETECTED ERRORS (AS AMENDED) |
| 82246904     | Granted     | 9015204       | 7/15/2009   | 4/21/2015  | 12/503794          | US | ONBOARDING RESOURCES TO AN IDENTITY MANAGEMENT SYSTEM                                                                                                      |
| 82246949     | Granted     | 8046450       | 3/13/2009   | 10/25/2011 | 12/403877          | US | ASSOCIATING NETWORK PORTS OF A COMPUTER SYSTEM WITH NETWORK PORTS OF A NETWORK DEVICE                                                                      |
| 82246970     | Granted     | 8103675       | 10/20/2008  | 1/24/2012  | 12/254303          | US | Predicting User Item Ratings                                                                                                                               |
| 82247030     | Granted     | 8723498       | 12/19/2008  | 41772      | 12/339984          | US | Systems And Methods Of Increasing Power Measurement Accuracy For Power Factor Correction                                                                   |
| 82247033     | Granted     | 8109142       | 4/30/2009   | 40946      | 12/433661          | US | INERTIAL SENSING SYSTEM WITH A CURVED BASE AND A DIAMAGNETIC MASS                                                                                          |
| 82247072     | Granted     | 8533843       | 10/13/2008  | 9/10/2013  | 12/250199          | US | A Device, Method, And Program Product For Determining An Overall Business Service Vulnerability Score                                                      |
| 82247075     | Granted     | 8209742       | 1/7/2009    | 6/26/2012  | 12/350130          | US | Computer-implemented Method For Obtaining A Minimum Biclique Cover In A Bipartite Dataset                                                                  |
| 82247153     | Granted     | 9058836       | 1/29/2009   | 6/16/2015  | 12/362432          | US | Data Transfer Apparatus                                                                                                                                    |
| 82247201     | Granted     | 8134774       | 4/16/2009   | 40981      | 12/386295          | US | DYNAMICALLY RECONFIGURABLE NEGATIVE INDEX MATERIAL CROSSBARS WITH GAIN                                                                                     |
| 82247276     | Granted     | 8670320       | 2/9/2010    | 41709      | 12/703164          | US | Quality Of Service Routing Architecture                                                                                                                    |
| 82247279     | Granted     | 8316289       | 1/29/2009   | 11/20/2012 | 12/361669          | US | Updating Sequential Data                                                                                                                                   |
| 82247342     | Granted     | 7971458       | 4/24/2008   | 40729      | 12/109313          | US | Bracket Assembly For Lock                                                                                                                                  |
| 82247384     | Published   |               | 1/22/2009   |            | 12/357745          | US | Methods For Secure Data Distribution                                                                                                                       |
| 82247396     | Granted     | 7817417       | 10/17/2008  | 10/19/2010 | 12/253781          | US | Flexible Airflow Baffle For An Electronic System                                                                                                           |
| 82247405     | Granted     | 8984906       | 8/7/2007    | 3/24/2015  | 11/834781          | US | Cool Design Data Center                                                                                                                                    |
| 82247447     | Published   |               | 9/29/2008   |            | 12/865512          | US | Neuromorphic Circuit                                                                                                                                       |
| 82247573     | Granted     | 7929295       | 6/23/2009   | 4/19/2011  | 12/489867          | US | Systems And Methods For Providing Airflow                                                                                                                  |
| 82247633     | Granted     | 8381167       | 1/29/2009   | 41324      | 12/320587          | US | Business Service Discovery                                                                                                                                 |
| 82247651     | Granted     | 8127124       | 3/19/2009   | 40967      | 12/407642          | US | Remote Configuration Of Computing Platforms                                                                                                                |
| 82247696     | Granted     | 8756094       | 1/26/2009   | 6/17/2014  | 12/359853          | US | RISK MITIGATION FOR COMPUTER SYSTEM CHANGE REQUESTS                                                                                                        |
| 82247759     | Granted     | 8392928       | 10/28/2008  | 41338      | 12/259837          | US | AUTOMATED WORKLOAD PLACEMENT RECOMMENDATIONS FOR A DATA CENTER                                                                                             |
| 82247762     | Granted     | 8539482       | 10/30/2008  | 9/17/2013  | 12/262110          | US | VIRTUAL-SERVER LICENSE STATUS DETERMINATION                                                                                                                |
| 82247768     | Application |               | 1/28/2009   |            | 12/360917          | US | Displaying Computer Resource Hierarchy                                                                                                                     |
| 82247774     | Allowed     |               | 1/28/2009   |            | 12/361510          | US | LICENSE MANAGER FOR CENTRAL MANAGEMENT PRODUCTS                                                                                                            |

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| 82247840     | Granted     | 8054575       | 1/12/2009   | 11/8/2011  | 12/352434          | US | Position Signal Processor                                                                            |
| 82247900     | Published   |               | 10/29/2009  |            | 12/608606          | US | Policy Enforcement In Trusted Platforms                                                              |
| 82247906     | Granted     | 8130641       | 3/13/2009   | 3/6/2012   | 12/403466          | US | Methods And Systems For Managing Network Traffic Within                                              |
| 82247942     | Granted     | 8280054       | 4/30/2009   | 10/2/2012  | 12/387352          | US | A Virtual Network Systems                                                                            |
| 82247954     | Granted     | 8041789       | 1/28/2009   | 10/18/2011 | 12/361365          | US | SCRAMBLING AND DESCRAMBLING SYSTEMS FOR SECURE COMMUNICATION                                         |
| 82247963     | Published   |               | 10/31/2008  |            | 12/262485          | US | MIGRATION OF PROFILES BETWEEN ENCLOSURES                                                             |
| 82248068     | Granted     | 8180715       | 12/11/2008  | 5/15/2012  | 12/332930          | US | Telecommunication Systems                                                                            |
| 82248140     | Granted     | 8205117       | 4/20/2009   | 6/19/2012  | 12/426303          | US | SYSTEMS AND METHODS FOR COLLABORATIVE FILTERING USING COLLABORATIVE INDUCTIVE TRANSFER               |
| 82248152     | Granted     | 7937506       | 10/31/2008  | 5/3/2011   | 12/262670          | US | USING COLLABORATIVE INDUCTIVE TRANSFER                                                               |
| 82248155     | Published   |               | 12/16/2008  |            | 12/316712          | US | Migratory Hardware Diagnostic Testing                                                                |
| 82248200     | Granted     | 7984282       | 3/5/2009    | 7/19/2011  | 12/398184          | US | RESTORING DATA TO A POINT IN A CONTINUUM OF INPUT/OUTPUT OPERATIONS                                  |
| 82248203     | Granted     | 8214685       | 10/31/2008  | 7/3/2012   | 12/262679          | US | CONTINUOUS, AUTOMATED DATABASE-TABLE PARTITIONING AND DATABASE-SCHEMA EVOLUTION                      |
| 82248212     | Granted     | 8881132       | 3/5/2009    | 11/4/2014  | 12/398185          | US | Evasion Of Power On Self Test During An Operating System Initiated Reboot                            |
| 82248218     | Granted     | 8448181       | 1/30/2009   | 5/21/2013  | 12/363581          | US | RECOVERING FROM A BACKUP COPY OF DATA IN A MULTI-SITE STORAGE SYSTEM                                 |
| 82248221     | Granted     | 8055493       | 1/30/2009   | 11/8/2011  | 12/363597          | US | System And Method For Update Of Firmware Of A Storage Array Controller In A Storage Area Network     |
| 82248260     | Published   |               | 1/23/2009   |            | 12/321612          | US | Sizing An Infrastructure Configuration Optimized For A Workload Mix                                  |
| 82248266     | Application |               | 10/31/2008  |            | 12/289678          | US | Sizing An Infrastructure Configuration Optimized For A Workload Mix Using A Predictive Model         |
| 82248269     | Granted     | 8271818       | 4/30/2009   | 9/18/2012  | 12/453148          | US | Placement Of Cells In Bins To Provide Non Overlapping Visualization Of Data Points Of A Scatter Plot |
| 82248278     | Granted     | 8312419       | 10/30/2008  | 41226      | 12/261324          | US | Management Of Multiple Scale Out Workloads                                                           |
| 82248446     | Granted     | 8055687       | 1/20/2009   | 11/8/2011  | 12/356479          | US | MANAGING UNDER-UTILIZED RESOURCES IN A COMPUTER IMPLEMENTED SERVICE                                  |
| 82248452     | Application |               | 10/31/2008  |            | 12/263314          | US | AUTOMATED LIFECYCLE MANAGEMENT OF A COMPUTER IMPLEMENTED SERVICE                                     |
| 82248458     | Granted     | 9009498       | 10/31/2008  | 42108      | 12/263336          | US | SYSTEM AND METHOD FOR DETERMINING INTERVALS OF A SPACE FILLING CURVE IN A QUERY BOX                  |
| 82248461     | Granted     | 8086555       | 1/23/2009   | 12/27/2011 | 12/359167          | US | POWER-CONSUMPTION ESTIMATION MODEL FOR COMPUTER                                                      |
| 82248467     | Allowed     |               | 2/12/2009   |            | 12/370551          | US | Estimating Power Consumption For A Target Host                                                       |
| 82248503     | Granted     | 9047124       | 10/14/2008  | 6/2/2015   | 12/251293          | US | Collaborative Filtering Systems And Methods                                                          |
|              |             |               |             |            |                    |    | Database Join Optimized For Flash Storage                                                            |
|              |             |               |             |            |                    |    | Query Scheduler                                                                                      |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82248512     | Granted   | 8180694       | 10/31/2008  | 5/15/2012  | 12/262538          | US | A System And Method For Incorporating Qualitative Imp Into Econometric Models                                                                                             |
| 82248521     | Granted   | 8938530       | 2/4/2009    | 1/20/2015  | 12/365771          | US | Method And System For Identifying Dynamic Content In Hypertext Transfer Protocol (HTTP) Responses                                                                         |
| 82248527     | Granted   | 8447734       | 11/30/2009  | 5/21/2013  | 12/627914          | US | HDAG Backup System With Variable Retention                                                                                                                                |
| 82248530     | Granted   | 8223344       | 1/27/2009   | 41107      | 12/360177          | US | POSITIONING DEVICES IN A RACK BASED ON OPTICAL SIGNALS                                                                                                                    |
| 82248578     | Granted   | 8281172       | 4/30/2009   | 41184      | 12/432905          | US | SERVER WITH MULTIPLE POWER SUPPLIES TRANSITIONING FIRST POWER SUPPLY FROM ITS ONLINE STATE TO ITS STANDBY STATE AND SECOND POWER SUPPLY TO ITS DEEP-SLEEP STATE (amended) |
| 82248587     | Granted   | 9128984       | 2/2/2009    | 9/8/2015   | 12/364107          | US | Query Plan Analysis Of Alternative Plans Using Robustness Mapping                                                                                                         |
| 82248629     | Published |               | 1/30/2009   |            | 12/363558          | US | AUTOMATED TEST EXECUTION IN A SHARED VIRTUALIZED RESOURCE POOL                                                                                                            |
| 82248638     | Granted   | 8315500       | 10/3/2008   | 11/20/2012 | 12/245612          | US | Metamaterial Inclusion Structure And Method                                                                                                                               |
| 82248650     | Granted   | 8136029       | 9/26/2008   | 3/13/2012  | 12/239461          | US | METHOD AND SYSTEM FOR CHARACTERISING A WEB SITE BY SAMPLING                                                                                                               |
| 82248653     | Granted   | 8116144       | 10/15/2008  | 2/14/2012  | 12/251805          | US | Memory Module Having A Memory Device Configurable To Different Data Pin Configurations                                                                                    |
| 82248707     | Granted   | 8264208       | 12/20/2008  | 41163      | 12/340704          | US | Systems And Methods Of Charging Super-capacitors                                                                                                                          |
| 82248755     | Granted   | 8347393       | 1/9/2009    | 1/1/2013   | 12/351788          | US | Method And System For Detecting A State Of A Web Application Using A Signature                                                                                            |
| 82248779     | Granted   | 8315055       | 7/10/2009   | 11/20/2012 | 12/500873          | US | Systems And Methods For Providing Heat Transfer                                                                                                                           |
| 82248815     | Granted   | 8081129       | 3/31/2009   | 12/20/2011 | 12/415715          | US | MEMRISTIVE ANTENNA                                                                                                                                                        |
| 82248887     | Granted   | 8121444       | 4/24/2009   | 40960      | 12/430061          | US | OPTICALLY AND ELECTRICALLY ACTUATABLE DEVICES                                                                                                                             |
| 82248893     | Granted   | 7985962       | 12/23/2008  | 7/26/2011  | 12/342399          | US | A MEMRISTIVE DEVICE                                                                                                                                                       |
| 82248896     | Granted   | 8006565       | 4/30/2009   | 8/30/2011  | 12/433775          | US | PRESSURE SENSOR GRID                                                                                                                                                      |
| 82248905     | Granted   | 7991253       | 4/30/2009   | 8/2/2011   | 12/433834          | US | MEMRISTIVE ARRAY WITH WAVEGUIDE                                                                                                                                           |
| 82249022     | Granted   | 8363654       | 11/7/2008   | 1/29/2013  | 12/266783          | US | Predictive Packet Forwarding For A Network Switch                                                                                                                         |
| 82249028     | Published |               | 12/22/2009  |            | 12/644021          | US | DYNAMICALLY ALLOCATING RESOURCES BETWEEN COMPUTER PARTITIONS                                                                                                              |
| 82249073     | Published |               | 7/2/2009    |            | 12/497433          | US | Method Of Selective Replication In A Storage Area Network                                                                                                                 |
| 82249127     | Granted   | 8289969       | 1/26/2009   | 41198      | 12/359536          | US | Network Edges Switch Configuration Based On Connection Profile                                                                                                            |
| 82249130     | Granted   | 7903404       | 4/29/2009   | 3/8/2011   | 12/432170          | US | DATA CENTERS                                                                                                                                                              |
| 82249151     | Published |               | 1/9/2009    |            | 12/351164          | US | Virtual Tape Library                                                                                                                                                      |
| 82249157     | Granted   | 9032240       | 4/23/2009   | 5/12/2015  | 12/428487          | US | Method And System For Providing High Availability SCTP Applications                                                                                                       |

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| 82249202     | Granted     | 8255405       | 1/30/2009   | 41149      | 12/363695          | US | Term Extraction From Service Description Documents                                                                     |
| 82249211     | Granted     | 8185536       | 1/30/2009   | 5/22/2012  | 12/363698          | US | Rank Order Service Providers Based On Desired Service Properties                                                       |
| 82249268     | Published   |               | 12/15/2009  |            | 12/638726          | US | Associating A Signing Key With A Software Component Of A Computing Platform                                            |
| 82249274     | Published   |               | 3/6/2009    |            | 12/399366          | US | Entity Identification And Information Retrieval With A Multiple Device                                                 |
| 82249325     | Application |               | 1/28/2009   |            | 12/361277          | US | Managing A Multi-parent Containment Hierarchy Of Computing Resources                                                   |
| 82249382     | Granted     | 8725707       | 3/26/2009   | 5/13/2014  | 12/411670          | US | Data Continuous SQL Process                                                                                            |
| 82249388     | Published   |               | 12/11/2008  |            | 12/314480          | US | System And Method For Providing Transaction Classification                                                             |
| 82249391     | Granted     | 9098563       | 7/14/2009   | 8/4/2015   | 12/502641          | US | Comparing Versions Of A Hierarchical Object                                                                            |
| 82249403     | Granted     | 8284945       | 6/2/2009    | 10/9/2012  | 12/476313          | US | Automatic Change Of Symmetrical Encryption Key                                                                         |
| 82249448     | Granted     | 8554736       | 4/30/2009   | 10/8/2013  | 12/432980          | US | Backup Method                                                                                                          |
| 82249460     | Granted     | 8290507       | 4/16/2009   | 10/16/2012 | 12/425055          | US | Locating A Wireless Device                                                                                             |
| 82249511     | Granted     | 8650396       | 12/1/2009   | 41681      | 12/628673          | US | Permission-based Dynamically Tunable Operating System Kernel                                                           |
| 82249520     | Published   |               | 8/25/2009   |            | 12/546954          | US | Associating Attribute Information With A File System Object                                                            |
| 82249592     | Published   |               | 6/9/2009    |            | 12/481533          | US | Identity Data Management In A High Availability Network                                                                |
| 82249628     | Granted     | 8208454       | 4/29/2009   | 6/26/2012  | 12/432584          | US | Determining Optimal Locations For Wireless Access Points In A Wireless Network                                         |
| 82249649     | Published   |               | 1/23/2009   |            | 12/358447          | US | A SYSTEM AND METHOD FOR DISCOVERING PROVIDERS                                                                          |
| 82249652     | Granted     | 9159090       | 6/9/2009    | 10/13/2015 | 12/409555          | US | Building A Standardized Web Form                                                                                       |
| 82249655     | Published   |               | 9/15/2009   |            | 12/560172          | US | Controlling Power Usage By At Least One Electronic Apparatus                                                           |
| 82249691     | Granted     | 8671295       | 7/30/2009   | 3/11/2014  | 12/512541          | US | GENERATING A SIGNAL TO REDUCE COMPUTER SYSTEM POWER CONSUMPTION FROM SIGNALS PROVIDED BY A PLURALITY OF POWER SUPPLIES |
| 82249694     | Granted     | 8489612       | 3/24/2009   | 7/16/2013  | 12/409978          | US | Identifying Similar Files In An Environment Having Multiple Client Computers                                           |
| 82249712     | Granted     | 8484621       | 6/24/2009   | 7/9/2013   | 12/490350          | US | Method And System For Data Centric Heap Profiling                                                                      |
| 82249754     | Granted     | 8655827       | 10/29/2009  | 2/18/2014  | 12/608878          | US | QUESTIONNAIRE GENERATION                                                                                               |
| 82249766     | Published   |               | 6/2/2009    |            | 12/476821          | US | SYSTEM AND METHOD FOR CLASSIFYING INFORMATION                                                                          |
| 82249814     | Granted     | 8019920       | 10/1/2008   | 9/13/2011  | 12/243420          | US | Method To Improve Operating Performance Of A Computing Device                                                          |
| 82249823     | Granted     | 8001310       | 3/4/2009    | 40771      | 12/397610          | US | SCALABLE COMPUTER NODE HAVING AN EXPANSION MODULE THAT IS SOCKET-COMPATIBLE WITH A CENTRAL PROCESSING UNIT             |
| 82249826     | Published   |               | 9/30/2008   |            | 12/242104          | US | Trusted Key Management For Virtualized Platforms                                                                       |

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| 82249829     | Granted     | 8539145       | 7/28/2009   | 9/17/2013  | 12/510822 US       | US | INCREASING THE NUMBER OF RANKS PER CHANNEL                                                            |
| 82249835     | Granted     | 8390625       | 10/29/2009  | 3/5/2013   | 12/608830 US       | US | TRANSFORMING STORED DATA INTO DATA OF REQUEST                                                         |
| 82249880     | Granted     | 8799616       | 11/17/2009  | 41856      | 12/619700 US       | US | DETAIL LEVEL<br>Method And System For Preferred CPU Binding On Virtual<br>Partitions                  |
| 82249892     | Application |               | 2/20/2009   |            | 12/390174 US       | US | Verifying Compatibility Of Blade Components                                                           |
| 82249895     | Published   |               | 4/9/2009    |            | 12/421152 US       | US | Systems And Methods For Activating A Network Appliance                                                |
| 82249901     | Granted     | 9141419       | 1/30/2009   | 9/22/2015  | 12/363415 US       | US | Capturing And Restoring An Appliance Image                                                            |
| 82249904     | Allowed     |               | 2/12/2009   |            | 12/370355 US       | US | Network Device Configuration Management By Physical<br>Location                                       |
| 82249961     | Granted     | 8693368       | 7/22/2009   | 41737      | 12/507734 US       | US | Method And System For Remote Identification Of A Network<br>Node                                      |
| 82250006     | Published   |               | 10/29/2009  |            | 12/608520 US       | US | Locating A Fault In A Communications Network                                                          |
| 82250024     | Granted     | 8694974       | 4/29/2009   | 4/8/2014   | 12/432635 US       | US | Load-checking Atomic Section                                                                          |
| 82250081     | Granted     | 8341314       | 3/25/2010   | 41268      | 12/731153 US       | US | Managing I/O Request In Storage System                                                                |
| 82250087     | Granted     | 8893146       | 12/23/2009  | 11/18/2014 | 12/645492 US       | US | Method And System Of An I/O Stack For Controlling Flows Of<br>Workload Specific I/O Requests          |
| 82250090     | Granted     | 8054763       | 5/15/2009   | 11/8/2011  | 12/466395 US       | US | Migration Of Switch In A Storage Area Network                                                         |
| 82250153     | Granted     | 8510578       | 4/28/2009   | 8/13/2013  | 12/431628 US       | US | Line-card Disabling For Power Management                                                              |
| 82250216     | Granted     | 9072018       | 4/30/2009   | 6/30/2015  | 12/433392 US       | US | Wireless Channel Switching Using Co-located Radios                                                    |
| 82250264     | Granted     | 8606058       | 4/30/2009   | 12/10/2013 | 12/433794 US       | US | MULTI-CHANNEL OPTICAL COUPLER                                                                         |
| 82250267     | Published   |               | 4/30/2009   |            | 12/433777 US       | US | Service Level Agreement Negotiation And Associated<br>Methods                                         |
| 82250321     | Granted     | 8924707       | 3/24/2010   | 42003      | 12/730276 US       | US | Communicating Confidential Information Between An<br>Application And A Database                       |
| 82250375     | Granted     | 8045253       | 5/28/2009   | 10/25/2011 | 12/473402 US       | US | SUB-DIFFRACTION-LIMITED IMAGING SYSTEMS AND<br>METHODS                                                |
| 82250405     | Granted     | 7979491       | 3/27/2009   | 40736      | 12/412821 US       | US | Producing Chunks From Input Data Using A Plurality Of<br>Processing Elements                          |
| 82250441     | Granted     | 8138756       | 4/24/2009   | 40988      | 12/429876 US       | US | MICROFIBER MAGNETOMETER                                                                               |
| 82250465     | Granted     | 8649270       | 10/30/2009  | 41681      | 12/609255 US       | US | DYNAMIC NETWORK CONFIGURATION                                                                         |
| 82250468     | Granted     | 8477045       | 10/29/2009  | 7/2/2013   | 12/608720 US       | US | CONFIGURATION INFORMATION PROVIDED TO<br>CONFIGURABLE ELECTRONIC DEVICE RESIDING IN A SHIPPING<br>BOX |
| 82250507     | Application |               | 3/4/2009    |            | 12/397393 US       | US | Networks Switch Providing For Notification Of Mac<br>Authentication Failure                           |
| 82250510     | Granted     | 8184758       | 12/16/2008  | 5/22/2012  | 12/335705 US       | US | Method And Apparatus For Detecting Electrical Idle                                                    |
| 82250516     | Granted     | 8024529       | 5/28/2009   | 9/20/2011  | 12/473391 US       | US | Providing Shared Memory In A Distributed Computing System                                             |

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| 82250522     | Published   |               | 1/18/2010   |            | 12/688913          | US | METHOD AND SYSTEM FOR GENERATING A SPACE-EFFICIENT SNAPSHOT OR SNAPCLONE OF LOGICAL DISKS      |
| 82250525     | Granted     | 7992058       | 12/16/2008  | 8/2/2011   | 12/335728          | US | Method And Apparatus For Loopback Self Testing                                                 |
| 82250570     | Granted     | 8305889       | 1/31/2010   | 11/6/2012  | 12/697267          | US | METHOD FOR ALLOCATING A RESOURCE AMONG CONSUMERS IN PROPORTION TO CONFIGURABLE WEIGHTS         |
|              |             |               |             |            |                    |    |                                                                                                |
| 82250579     | Granted     | 8607245       | 5/15/2009   | 4/16/18    | 12/466416          | US | DYNAMIC PROCESSOR-SET MANAGEMENT                                                               |
| 82250627     | Granted     | 8631109       | 5/12/2009   | 1/14/2014  | 12/464668          | US | System And Method For Dynamic Control Of Network Management Traffic Loads                      |
| 82250636     | Published   |               | 2/3/2009    |            | 12/364806          | US | Intuitive File Sharing With Transparent Security                                               |
| 82250639     | Application |               | 3/19/2009   |            | 12/407722          | US | Single Sign-on Method And System                                                               |
| 82250642     | Published   |               | 8/27/2009   |            | 12/548869          | US | Method And System For Administration Of Storage Objects                                        |
| 82250690     | Granted     | 8195877       | 4/29/2009   | 4/10/65    | 12/432035          | US | CHANGING THE REDUNDANCY PROTECTION FOR DATA ASSOCIATED WITH A FILE                             |
| 82250750     | Granted     | 8446044       | 10/28/2009  | 5/21/2013  | 12/607434          | US | Power Conversion And Distribution Scheme For Electronic Equipment Racks                        |
| 82250756     | Granted     | 8390705       | 10/27/2009  | 4/13/38    | 12/606947          | US | NANOWIRE PHOTODIODES                                                                           |
| 82250759     | Published   |               | 4/30/2009   |            | 12/433418          | US | Adaptive Merging In Database Indexes                                                           |
| 82250765     | Granted     | 8474041       | 4/22/2010   | 4/14/50    | 12/765772          | US | Autonomous Diagnosis And Mitigation Of Network Anomalies                                       |
| 82250768     | Published   |               | 4/13/2009   |            | 12/422875          | US | Data Stream Processing                                                                         |
| 82250771     | Granted     | 8290880       | 4/22/2009   | 10/16/2012 | 12/427924          | US | System And Method For Estimating A Parameter That Represents Data Describing A Physical System |
| 82250780     | Published   |               | 4/3/2009    |            | 12/418484          | US | Personal Project Management                                                                    |
| 82250816     | Published   |               | 8/19/2009   |            | 12/544012          | US | Reporting Operational Information Of A Network Device                                          |
| 82250819     | Published   |               | 9/29/2009   |            | 12/569824          | US | CONSISTENCY CHECKING FOR CREDIT-BASED CONTROL OF DATA COMMUNICATIONS                           |
| 82250825     | Published   |               | 4/27/2009   |            | 12/430411          | US | System And Method For Making A Recommendation Based On User Data                               |
| 82250834     | Published   |               | 8/26/2009   |            | 12/461842          | US | Data Restructuring In Multi Level Memory Hierarchies                                           |
| 82250837     | Published   |               | 6/18/2009   |            | 12/486816          | US | Providing Collaborative Business Intelligence                                                  |
| 82250876     | Granted     | 8924846       | 7/3/2009    | 12/30/2014 | 13/258464          | US | Apparatus And Method For Text Extraction                                                       |
| 82250888     | Published   |               | 10/30/2009  |            | 12/609490          | US | Email Worm Detection Methods And Devices                                                       |
| 82250891     | Published   |               | 10/29/2009  |            | 12/608524          | US | Automated Design Of An IT Infrastructure                                                       |
| 82250894     | Granted     | 8390454       | 7/31/2009   | 3/5/2013   | 12/534028          | US | A USB Hosted Sensor Module                                                                     |
| 82250900     | Published   |               | 7/31/2009   |            | 12/534045          | US | An Optical System And Method For Monitoring And Locating Objects                               |
| 82250903     | Granted     | 8251279       | 6/30/2009   | 8/28/2012  | 12/495678          | US | Variable Data Barcode                                                                          |
| 82251011     | Granted     | 8812166       | 10/20/2009  | 4/18/70    | 12/581990          | US | SUPPLYING A RESOURCE TO AN ENTITY FROM A RESOURCE ACTUATOR                                     |

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| 82251014     | Granted   | 8270200       | 7/30/2009   | 9/18/2012  | 12/512230          | US | Nanoscale Three-terminal Switching Device                                                                       |
| 82251023     | Granted   | 8204873       | 8/26/2009   | 6/19/2012  | 12/548352          | US | System And Method For Query Expression Optimization                                                             |
| 82251062     | Granted   | 8000265       | 6/12/2009   | 40771      | 12/483268          | US | Method And System For Determining Network Topology                                                              |
|              |           |               |             |            |                    |    | Virtual Private Network In Multi Protocol Label Switching (MPLS) Based Virtual Private Networks (VPNs)          |
| 82251128     | Published |               | 10/19/2009  |            | 12/581840          | US | Modeling Wholesale Price Schedules To Reduce Double Marginalization                                             |
| 82251134     | Granted   | 8910049       | 8/20/2010   | 12/9/2014  | 12/859803          | US | USER-INITIATED MODE FOR REMOTE SUPPORT                                                                          |
| 82251140     | Granted   | 8566519       | 7/9/2010    | 10/22/2013 | 12/833594          | US | Providing Preferred Seed Data For Seeding A Data Duplicating Storage System                                     |
| 82251155     | Published |               | 10/5/2009   |            | 12/573800          | US | FLOW CONTROL SYSTEM AND METHOD                                                                                  |
| 82251188     | Published |               | 4/10/2009   |            | 12/422066          | US | Dynamic Assignment Of Graphics Processing Unit To A Virtual Machine                                             |
| 82251200     | Published |               | 7/23/2009   |            | 12/508254          | US | APPARATUS, METHOD AND SYSTEM FOR MODIFYING PAGES                                                                |
| 82251206     | Granted   | 8108718       | 11/13/2009  | 40939      | 12/618675          | US | Checkpointing In Massively Parallel Processing                                                                  |
| 82251209     | Published |               | 7/29/2009   |            | 12/511200          | US | Method And System For Calendaring Events                                                                        |
| 82251215     | Granted   | 8863152       | 2/19/2010   | 10/14/2014 | 12/708542          | US | Communication Bridge                                                                                            |
| 82251254     | Granted   | 7519385       | 10/27/2005  | 4/14/2009  | 11/259865          | US | Wireless Access Point (AP) Automatic Channel Selection And Automatic Power Adjustment                           |
| 82251257     | Granted   | 9003419       | 7/30/2009   | 42101      | 12/512246          | US | Network Balancing Procedure That Includes Redistributing Flows On Arcs Incident On A Batch Of Vertices          |
| 82251263     | Published |               | 7/31/2009   |            | 12/533693          | US | Method And System To Maintain Service Architecture Repositories                                                 |
| 82251269     | Granted   | 7031336       | 11/27/2002  | 38825      | 10/306972          | US | SPACE-TIME-POWER SCHEDULING FOR WIRELESS NETWORKS                                                               |
| 82251275     | Granted   | 7881313       | 4/14/2006   | 2/1/2011   | 11/404309          | US | Space-time-power Scheduling For Wireless Networks                                                               |
| 82251278     | Granted   | 7366202       | 12/8/2003   | 39567      | 10/730649          | US | System And Method For Interference Mitigation For Wireless Communication                                        |
| 82251317     | Granted   | 8374622       | 12/12/2007  | 41317      | 11/955055          | US | Call Admission Control For Wi Fi                                                                                |
| 82251326     | Granted   | 7873352       | 5/9/2006    | 40561      | 11/430547          | US | FAST ROAMING IN A WIRELESS NETWORK USING PER-STA PAIRWISE MASTER KEYS SHARED ACROSS PARTICIPATING ACCESS POINTS |
| 82251374     | Published |               | 8/27/2009   |            | 12/548987          | US | Method And System For Processing Network Activity Data                                                          |
| 82251380     | Allowed   |               | 7/8/2003    |            | 10/615095          | US | Implementing "all Wireless" Network Over Wi Fi Equipment Using "scheduled TDMA"                                 |
| 82251437     | Allowed   |               | 6/5/2009    |            | 13/260291          | US | SYSTEM AND METHOD FOR REPRESENTING USER INTERACTION WITH A WEB SERVICE                                          |
| 82251446     | Granted   | 8054620       | 4/29/2009   | 11/8/2011  | 12/432483          | US | Stacked Drives For A Blade System                                                                               |
| 82251686     | Granted   | 7124090       | 12/8/1999   | 39007      | 09/456647          | US | Electronic Publication Distribution Method and System                                                           |

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| 82251689     | Granted | 8583476       | 9/15/2004   | 41590      | 10/941303          | US | Electronic Publishing And Delivery                                                                                 |
| 82251692     | Granted | 8515806       | 10/16/2006  | 8/20/2013  | 11/549734          | US | Electronic Publication Distribution Method And System                                                              |
| 82251755     | Granted | 6430562       | 3/1/1999    | 37474      | 09/260859          | US | Integrated Resource Management System and Method                                                                   |
| 82251761     | Granted | 6052694       | 3/18/1998   | 4/18/2000  | 09/044105          | US | METHOD AND APPARATUS FOR LOGGING DATABASE PERFORMANCE CHARACTERISTICS                                              |
| 82251779     | Granted | 7054821       | 1/31/1996   | 5/30/2006  | 08/594563          | US | System and Method for Modeling Skills                                                                              |
| 82251842     | Granted | 6341282       | 4/19/1999   | 1/22/2002  | 09/295234          | US | Information Retrieval System and Method                                                                            |
| 82251887     | Granted | 6356886       | 11/30/1995  | 3/12/2002  | 08/566432          | US | Apparatus And Method For Communicating With A Knowledge Base                                                       |
| 82251893     | Granted | 6236984       | 11/26/1997  | 5/22/2001  | 08/980351          | US | Method and System of Managing Contract Negotiation Records                                                         |
| 82251899     | Granted | 6938007       | 6/6/1996    | 38594      | 08/660616          | US | Method of Pricing Application Software                                                                             |
| 82251902     | Granted | 6041362       | 10/20/1995  | 3/21/2000  | 08/546390          | US | Method And System For Integrating Disparate Information Technology Applications And Platforms Across An Enterprise |
| 82252004     | Granted | 6182222       | 3/25/1997   | 1/30/2001  | 08/824222          | US | Secure Data Storage System and Method                                                                              |
| 82252010     | Granted | 6032131       | 5/20/1997   | 36585      | 08/859239          | US | System And Method For Accurately Modeling Spending                                                                 |
| 82252064     | Granted | 6820071       | 1/16/1997   | 38307      | 08/784224          | US | Knowledge Management System and Method                                                                             |
| 82252070     | Granted | 6208984       | 8/29/1997   | 36977      | 08/921128          | US | Method and System of Determining Access to Records of Members of a Community                                       |
| 82252076     | Granted | 6381626       | 4/22/1999   | 4/30/2002  | 09/296353          | US | ATM Video Advertising                                                                                              |
| 82252124     | Granted | 6453352       | 7/14/1997   | 37516      | 08/892580          | US | Integrated Electronic Commerce System and Method                                                                   |
| 82252136     | Granted | 6796488       | 3/27/1997   | 9/28/2004  | 08/828022          | US | Automated System and Method for Check Amount Encoding at a Point-of-Sale                                           |
| 82252142     | Granted | 6618728       | 1/31/1996   | 9/9/2003   | 08/594561          | US | Multi-process Compression                                                                                          |
| 82252154     | Granted | 6018715       | 2/29/1996   | 1/25/2000  | 08/609034          | US | Automated Travel Planning System                                                                                   |
| 82252193     | Granted | 7156300       | 6/7/1995    | 39084      | 08/487813          | US | System And Method For Dispensing Of A Receipt Reflecting Prepaid Phone Services                                    |
| 82252208     | Granted | 5977967       | 5/1/1996    | 11/2/1999  | 08/642002          | US | Object-Oriented Business Object Interface Framework and Method                                                     |
| 82252259     | Granted | 5991766       | 12/2/1997   | 11/23/1999 | 08/982338          | US | Method And System For Managing Redundant Objects In A Distributed Object System                                    |
| 82252262     | Granted | 5991882       | 8/7/1997    | 11/23/1999 | 08/908302          | US | Automated Password Reset                                                                                           |
| 82252340     | Granted | 5832451       | 1/23/1996   | 11/3/1998  | 08/589934          | US | Automated Travel Service Management Information System                                                             |
| 82252373     | Granted | 6119094       | 2/29/1996   | 9/12/2000  | 08/610107          | US | Automated System for Identifying Alternate Low-Cost Travel Arrangements                                            |
| 82252385     | Granted | 5839114       | 2/29/1996   | 36116      | 08/609040          | US | Automated System For Selecting An Initial Computer Reservation System                                              |

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| 82252448     | Granted | 5983195       | 6/6/1997    | 36473      | 08/870513          | US | METHOD AND SYSTEM FOR SCHEDULING PRODUCT ORDERS IN A MANUFACTURING FACILITY                                   |
| 82252499     | Granted | 5732274       | 11/8/1995   | 35878      | 08/555358          | US | Method For Compilation Using A Database For Target Language Independence                                      |
| 82252502     | Granted | 5710915       | 12/21/1995  | 1/20/1998  | 08/576102          | US | Method For Accelerating Access To A Database Clustered Partitioning                                           |
| 82252505     | Granted | 5687377       | 10/6/1995   | 11/11/1997 | 08/539514          | US | Method For Storing Variables In A Programming Language                                                        |
| 82252511     | Granted | 6026397       | 5/22/1996   | 2/15/2000  | 08/651319          | US | Data Analysis System and Method                                                                               |
| 82252514     | Granted | 5778390       | 6/7/1996    | 7/7/1998   | 08/660636          | US | METHOD AND SYSTEM FOR CREATING, DUPLICATING, AND ARCHIVING DATABASE FILES                                     |
| 82252523     | Granted | 5890132       | 6/14/1996   | 3/30/1999  | 08/664460          | US | Associating A Physical Application To A Business Operation                                                    |
| 82252589     | Granted | 5737727       | 1/25/1996   | 4/7/1998   | 08/591920          | US | Process Management System And Method                                                                          |
| 82252625     | Granted | 5886634       | 5/5/1997    | 3/23/1999  | 08/851221          | US | Item Removal System And Method                                                                                |
| 82252628     | Granted | 5819231       | 5/1/1996    | 10/6/1998  | 08/617672          | US | Compensation Planning Tool And Method                                                                         |
| 82252637     | Granted | 5721655       | 7/15/1996   | 2/24/1998  | 08/680369          | US | Method For Labeling A Removable Media Cartridge                                                               |
| 82252643     | Granted | 5745690       | 2/29/1996   | 4/28/1998  | 08/609141          | US | Data Processing System and Method                                                                             |
| 82252649     | Granted | 5740431       | 1/24/1996   | 4/14/1998  | 08/590858          | US | Configuration File Management                                                                                 |
| 82252688     | Granted | 5819281       | 2/26/1996   | 10/6/1998  | 08/606983          | US | Notification Of Aspect Value Change In Object-oriented Programming                                            |
| 82252697     | Granted | 5745689       | 5/23/1996   | 4/28/1998  | 08/652066          | US | System and Method for Providing Pager Services to Users of a Computer Network                                 |
| 82252706     | Granted | 5778389       | 5/23/1996   | 7/7/1998   | 08/652065          | US | Method And System For Synchronizing Computer File Directories                                                 |
| 82252709     | Granted | 5737606       | 7/18/1996   | 4/7/1998   | 08/683289          | US | Method And System For Delegation In A Class-based Language                                                    |
| 82252715     | Granted | 6055637       | 9/27/1996   | 4/25/2000  | 08/722841          | US | SYSTEM AND METHOD FOR ACCESSING ENTERPRISE-WIDE RESOURCE BY PRESENTING TO THE RESOURCE A TEMPORARY CREDENTIAL |
| 82252757     | Granted | 5964828       | 1/30/1998   | 10/12/1999 | 09/016529          | US | Method And System For Maintaining The Integrity Of Objects                                                    |
| 82252760     | Granted | 6029177       | 1/30/1998   | 2/22/2000  | 09/016143          | US | Method And System For Maintaining The Integrity Of A Database Providing Persistent Storage For Objects        |
| 82252814     | Granted | 5964831       | 10/29/1996  | 10/12/1999 | 08/741148          | US | Distributed On-line Data Communications System And Method                                                     |
| 82252820     | Granted | 5743742       | 4/1/1996    | 4/28/1998  | 08/625967          | US | METHOD AND SYSTEM FOR MEASURING LEADERSHIP EFFECTIVENESS                                                      |
| 82252838     | Granted | 5828833       | 8/15/1996   | 10/27/1998 | 08/700617          | US | Method And System For Allowing Remote Procedure Calls Through A Network Firewall                              |
| 82252886     | Granted | 5933818       | 6/2/1997    | 8/3/1999   | 08/869281          | US | Autonomous Knowledge Discovery System And Method                                                              |
| 82252889     | Granted | 5758346       | 1/29/1997   | 5/26/1998  | 08/790411          | US | Converting Representations Of Year                                                                            |

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| 82253003     | Granted | 5675649       | 11/30/1995  | 10/7/1997  | 08/565525          | US | Process For Cryptographic Key Generation And Safekeeping                                                               |
| 82253009     | Granted | 5787424       | 11/30/1995  | 7/28/1998  | 08/565535          | US | Process And System For Recursive Document Retrieval                                                                    |
| 82253012     | Granted | 5745893       | 11/30/1995  | 4/28/1998  | 08/565806          | US | Process And System For Arrangement Of Documents                                                                        |
| 82253015     | Granted | 5808615       | 5/1/1996    | 9/15/1998  | 08/640604          | US | Process And System For Mapping The Relationship Of The Content Of A Collection Of Documents                            |
| 82253063     | Granted | 5796633       | 7/12/1996   | 8/18/1998  | 08/678934          | US | Method And System For Performance Monitoring In Computer Networks                                                      |
| 82253066     | Granted | 5696701       | 7/12/1996   | 12/9/1997  | 08/678800          | US | Method And System For Monitoring The Performance Of Computers In Computer Networks Using Modular Extensions            |
| 82253069     | Granted | 5758071       | 7/12/1996   | 5/26/1998  | 08/679293          | US | Method And System For Tracking The Configuration Of A Computer Coupled To A Computer Network                           |
| 82253207     | Granted | 7114147       | 4/23/2001   | 9/26/2006  | 09/840727          | US | Method and System for Reporting XML Data Based on Precomputed Context and a Document Object Model                      |
| 82253696     | Granted | 6850866       | 9/12/2002   | 2/1/2005   | 10/242881          | US | MANAGING PERFORMANCE METRICS DESCRIBING A RELATIONSHIP BETWEEN A PROVIDER AND A CLIENT                                 |
| 82253774     | Granted | 7587308       | 11/21/2005  | 9/8/2009   | 11/285090          | US | WORD RECOGNITION USING ONTOLOGIES                                                                                      |
| 82254071     | Granted | 6728603       | 12/18/2001  | 4/27/2004  | 10/025332          | US | System and Method for Managing Wireless Vehicular Communications                                                       |
| 82254080     | Granted | 8984326       | 10/31/2007  | 3/17/2015  | 11/931677          | US | TESTING DISASTER RECOVERY ELEMENTS                                                                                     |
| 82254125     | Granted | 6687560       | 11/13/2001  | 2/3/2004   | 10/008098          | US | Processing Performance Data Describing a Relationship Between a Provider and a Client                                  |
| 82254134     | Granted | 6892234       | 6/12/2002   | 5/10/2005  | 10/170284          | US | Multi-Tiered Enterprise Management System And Method Including A Presentation Services Unit External To The Enterprise |
| 82254251     | Granted | 8417704       | 9/9/2003    | 4/9/2013   | 10/657916          | US | Extensible Agent System And Method                                                                                     |
| 82254260     | Granted | 6901418       | 5/7/2002    | 5/31/2005  | 10/139631          | US | Data Archive Recovery                                                                                                  |
| 82254503     | Granted | 7149206       | 2/8/2002    | 12/12/2006 | 10/072121          | US | System And Method For Managing Wireless Vehicular Communications                                                       |
| 82254578     | Granted | 7099751       | 10/1/2002   | 8/29/2006  | 10/260527          | US | DRIVE-BY-WIRELESS VEHICLE CONTROL                                                                                      |
| 82254704     | Granted | 8103534       | 10/23/2002  | 1/24/2012  | 10/279188          | US | System And Method For Managing Supplier Intelligence                                                                   |
| 82254713     | Granted | 7165036       | 10/23/2002  | 1/16/2007  | 10/279195          | US | System and Method for Managing a Procurement Process                                                                   |
| 82254815     | Granted | 6970803       | 10/25/2002  | 11/29/2005 | 10/280082          | US | DETERMINING THE COMPLEXITY OF A COMPUTING ENVIRONMENT                                                                  |
| 82254887     | Granted | 6791471       | 10/1/2002   | 9/14/2004  | 10/260528          | US | COMMUNICATING POSITION INFORMATION BETWEEN VEHICLES                                                                    |
| 82254944     | Granted | 7469417       | 6/17/2003   | 12/23/2008 | 10/462994          | US | Infrastructure Method And System For Authenticated Dynamic Security Domain Boundary Extension                          |
| 82254956     | Granted | 6750418       | 12/11/2002  | 6/15/2004  | 10/316971          | US | METHOD AND SYSTEM FOR WELD PROCESS MONITORING                                                                          |
| 82255082     | Granted | 8676853       | 2/27/2003   | 3/18/2014  | 10/375331          | US | System And Method For Software Reuse                                                                                   |

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| 82255088     | Granted   | 7580947       | 3/27/2003   | 8/25/2009  | 10/401104          | US | Data Representation For Improved Link Analysis                                                                                |
| 82255190     | Granted   | 7277879       | 12/17/2002  | 10/2/2007  | 10/321788          | US | Concept Navigation in Data Storage Systems                                                                                    |
| 82255394     | Granted   | 7562215       | 5/21/2003   | 7/14/2009  | 10/443448          | US | SYSTEM AND METHOD FOR ELECTRONIC DOCUMENT SECURITY                                                                            |
| 82255439     | Granted   | 7562024       | 6/18/2003   | 7/14/2009  | 10/465481          | US | Method And System For Addressing Client Service Outages                                                                       |
| 82255451     | Granted   | 7725388       | 5/5/2003    | 5/25/2010  | 10/430361          | US | Verification Of Electronic Financial Transactions                                                                             |
| 82255499     | Granted   | 8285578       | 1/21/2004   | 10/9/2012  | 10/763072          | US | Managing Information Technology (IT) Infrastructure Of An Enterprise Using A Centralized Logistics And Management (CLAM) Tool |
| 82255751     | Granted   | 7350185       | 9/3/2003    | 3/25/2008  | 10/554633          | US | MACRO PATTERN EFFORT ESTIMATION                                                                                               |
| 82255898     | Granted   | 7278065       | 11/17/2003  | 10/2/2007  | 10/715013          | US | ENTERPRISE DIRECTORY SERVICE DOMAIN CONTROLLER REPLICATION ALERT AND REPAIR                                                   |
| 82255937     | Granted   | 7756737       | 12/17/2003  | 7/13/2010  | 10/738819          | US | USER-BASED METHOD AND SYSTEM FOR EVALUATING ENTERPRISE SOFTWARE SERVICES COSTS                                                |
| 82255940     | Granted   | 7590630       | 12/15/2003  | 9/15/2009  | 10/736001          | US | MANAGING ELECTRONIC INFORMATION                                                                                               |
| 82256000     | Granted   | 7356814       | 12/15/2003  | 4/8/2008   | 10/736304          | US | System, Method, And Computer Program Product For Communicating With An Ldap Server                                            |
| 82256015     | Granted   | 7693426       | 12/18/2003  | 4/6/2010   | 10/739812          | US | LASER-BASED COMMUNICATIONS WITH A REMOTE INFORMATION SOURCE                                                                   |
| 82256147     | Granted   | 8145898       | 12/23/2003  | 3/27/2012  | 10/744122          | US | ENCRYPTION/DECRYPTION PAY PER USE WEB SERVICE                                                                                 |
| 82256204     | Granted   | 8533027       | 7/30/2004   | 9/10/2013  | 10/902256          | US | USER INTERFACE ENABLING APPROVAL/DISAPPROVAL OF REVISED CONTRACT PERFORMANCE INDICATORS                                       |
| 82256252     | Granted   | 8059580       | 5/14/2004   | 11/15/2011 | 10/846064          | US | INTERNET MICRO CELL                                                                                                           |
| 82256306     | Granted   | 8386597       | 9/9/2005    | 2/26/2013  | 11/223537          | US | SYSTEMS AND METHODS FOR THE PROVISION OF DATA PROCESSING SERVICES TO MULTIPLE ENTITIES                                        |
| 82256393     | Published |               | 3/20/2006   |            | 11/384593          | US | Personnel Motivation Model                                                                                                    |
| 82256396     | Granted   | 7437446       | 11/1/2004   | 10/14/2008 | 10/977497          | US | REPORTING OF ABNORMAL COMPUTER RESOURCE UTILIZATION DATA                                                                      |
| 82256453     | Published |               | 4/5/2004    |            | 10/818013          | US | SYSTEM AND METHOD FOR INCREASING ORGANIZATIONAL ADAPTABILITY                                                                  |
| 82256456     | Granted   | 7703123       | 8/9/2004    | 4/20/2010  | 10/914620          | US | Method And System For Security Control In An Organization                                                                     |
| 82256516     | Granted   | 8078546       | 11/22/2005  | 12/13/2011 | 11/284866          | US | METHOD AND PROCESS FOR EMPLOYING A RETIRED WORKFORCE                                                                          |
| 82256522     | Granted   | 8332479       | 8/26/2005   | 12/11/2012 | 11/213490          | US | Enterprise Application Server System And Method                                                                               |
| 82256636     | Granted   | 7574694       | 9/28/2004   | 8/11/2009  | 10/952542          | US | Method For Application And Infrastructure Rationalization                                                                     |
| 82256639     | Granted   | 7301464       | 5/24/2005   | 11/27/2007 | 11/135868          | US | PROCESS AND METHOD FOR SAFER VEHICLE NAVIGATION THROUGH FACIAL GESTURE RECOGNITION AND OPERATOR CONDITION MONITORING          |
| 82256702     | Granted   | 6983202       | 4/12/2004   | 1/3/2006   | 10/822490          | US | IMPLEMENTING GEO-FENCING ON MOBILE DEVICES                                                                                    |

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| 82256711     | Granted   | 7198192       | 2/1/2005    | 4/3/2007   | 11/048239          | US | WIRELESS MOBILE INSTANT PRODUCT PRICE COMPARIS AND PRODUCT REVIEW                                            |
| 82256762     | Granted   | 7414542       | 12/2/2004   | 8/19/2008  | 11/002177          | US | SYSTEM AND METHOD FOR SIGNALING STATUS OF TRAFFIC FLOW                                                       |
| 82256810     | Granted   | 8166185       | 3/5/2002    | 4/24/2012  | 10/092181          | US | System And Method For Enterprise Software Distribution                                                       |
| 82256816     | Granted   | 6983449       | 3/15/2002   | 1/3/2006   | 10/099331          | US | System And Method For Configuring Software For Distribution                                                  |
| 82256825     | Granted   | 7356394       | 1/11/2005   | 4/8/2008   | 11/033212          | US | RFID VEHICLE MANAGEMENT SYSTEM AND METHOD                                                                    |
| 82256942     | Granted   | 7480680       | 4/28/2005   | 1/20/2009  | 11/116985          | US | Validating Application Resources                                                                             |
| 82256999     | Published |               | 5/11/2005   |            | 11/126939          | US | ENTERPRISE-TO-ENTERPRISE INTEGRATION                                                                         |
| 82257074     | Granted   | 7690002       | 10/11/2005  | 3/30/2010  | 11/247703          | US | SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR SYSTEM EVENT NOTIFICATION AND TRACKING                      |
| 82257128     | Granted   | 7423399       | 4/21/2006   | 9/9/2008   | 11/408486          | US | APPARATUS, AND ASSOCIATED METHOD, FOR CONTROLLING THE REPETITION RATE OF AN INTERMITTENT WINDSHIELD WIPER    |
| 82257137     | Granted   | 7302306       | 5/15/2006   | 11/27/2007 | 11/434040          | US | Determining Processing Times At Stations In An Assembly System                                               |
| 82257182     | Granted   | 7992002       | 7/7/2006    | 8/2/2011   | 11/456165          | US | Data Depository And Associated Methodology Providing Secured Access Pursuant Standard Conformity             |
| 82257188     | Published |               | 9/13/2006   |            | 11/531361          | US | DETERMINING A TECHNOLOGY STATE OF AN ENTITY USING A TECHNOLOGY INDEX                                         |
| 82257194     | Granted   | 7937356       | 11/16/2006  | 5/3/2011   | 11/560389          | US | APPARATUS, AND ASSOCIATED METHOD, FOR ASSESSING VIABILITY OF COMMUNICATION SYSTEM ARRANGEMENT TRANSFORMATION |
| 82257260     | Published |               | 7/24/2008   |            | 12/178961          | US | A SYSTEM AND METHOD FOR QUANTITATIVE ASSESSMENT OF THE AGILITY OF A BUSINESS OFFERING                        |
| 82257263     | Allowed   |               | 12/19/2006  |            | 11/612775          | US | APPARATUS, AND ASSOCIATED METHOD, FOR CONTROLLING CONNECTIVITY OF A COMPUTER DEVICE WITH A COMPUTER NETWORK  |
| 82257269     | Granted   | 7770058       | 12/29/2006  | 8/3/2010   | 11/618617          | US | DISASTER RECOVERY WITHIN SECURE ENVIRONMENTS                                                                 |
| 82257314     | Published |               | 7/2/2007    |            | 11/772725          | US | SYSTEMS AND PROCESSES FOR EVALUATING WEBRAGES                                                                |
| 82257317     | Granted   | 8930010       | 2/5/2007    | 1/6/2015   | 11/671358          | US | Intelligent Assembly System And Method Of Use                                                                |
| 82257326     | Granted   | 7966212       | 9/6/2007    | 6/21/2011  | 11/851258          | US | Quantitative Alignment Of Business Offerings With The Expectations Of A Business Prospect                    |
| 82257329     | Granted   | 8001158       | 12/13/2007  | 8/16/2011  | 11/956267          | US | SYSTEMS AND PROCESSES FOR EVALUATING DATABASE COMPLEXITIES                                                   |
| 82257368     | Granted   | 8528070       | 9/5/2007    | 9/3/2013   | 11/899288          | US | System And Method For Secure Service Delivery                                                                |
| 82257386     | Granted   | 8234140       | 9/26/2007   | 7/31/2012  | 11/904084          | US | SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR RESOURCE COLLABORATION ESTIMATION                           |
| 82257431     | Granted   | 7966363       | 10/30/2007  | 40715      | 11/929020          | US | Method And System For Visualizing Distributed Systems                                                        |

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| 82257440     | Granted   | 9002012       | 12/1/2007   | 4/7/2015   | 11/949028          | US | APPARATUS AND METHOD FOR SECURING DATA IN COMPUTER STORAGE                                                                        |
| 82257449     | Published |               | 6/30/2008   |            | 12/164623          | US | MANAGING CHANGE REQUESTS IN AN ENTERPRISE                                                                                         |
| 82257452     | Granted   | 8364788       | 3/13/2008   | 1/29/2013  | 12/047855          | US | PROCESSING CLIENT REQUESTS FOR COMMON SERVICES                                                                                    |
|              |           |               |             |            |                    |    | ACCORDING TO ONE OR MORE CANONICAL FORMS                                                                                          |
| 82257458     | Granted   | 9015056       | 2/6/2008    | 4/21/2015  | 12/012836          | US | PRESCRIPTION REFILL REMINDER SYSTEM AND METHOD                                                                                    |
| 82257497     | Published |               | 2/1/2008    |            | 12/012391          | US | SYSTEM AND METHOD FOR GENERATING LOCATION COORDINATES                                                                             |
| 82257500     | Granted   | 7991631       | 2/12/2008   | 8/2/2011   | 12/029860          | US | MANAGING A MULTI-SUPPLIER ENVIRONMENT                                                                                             |
| 82257512     | Granted   | 8255916       | 4/10/2008   | 8/28/2012  | 12/100775          | US | APPARATUS, AND ASSOCIATED METHOD, FOR ALLOCATING PROCESSING AMONGST DATA CENTERS                                                  |
| 82257557     | Granted   | 8566182       | 8/7/2008    | 10/22/2013 | 12/188090          | US | ENTERPRISE ASSET MANAGEMENT                                                                                                       |
| 82257560     | Published |               | 4/22/2008   |            | 12/148767          | US | VIRTUALIZED APPLICATION ENVIRONMENT                                                                                               |
| 82257569     | Granted   | 8255349       | 6/10/2008   | 8/28/2012  | 12/136522          | US | AUTOMATED DESIGN OF COMPUTER SYSTEM ARCHITECTURE                                                                                  |
| 82257575     | Granted   | 7970726       | 5/9/2008    | 6/28/2011  | 12/118361          | US | APPARATUS, AND AN ASSOCIATED METHOD, FOR QUANTIFYING A QUALITY OF A USE CASE                                                      |
| 82257581     | Published |               | 6/4/2008    |            | 12/132858          | US | APPARATUS, AND ASSOCIATED METHOD, FOR PROVIDING PERSONALIZED CONTENT TO AN EXHIBIT-AREA GUEST                                     |
| 82257584     | Granted   | 8782613       | 8/12/2008   | 7/15/2014  | 12/190478          | US | OPTIMIZING APPLICATIONS USING SOURCE CODE PATTERNS AND PERFORMANCE ANALYSIS                                                       |
| 82257629     | Published |               | 8/13/2008   |            | 12/190712          | US | FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                                                                  |
| 82257635     | Published |               | 8/13/2008   |            | 12/190933          | US | BOOKMARKS FOR FLEXIBLE INTEGRATED ACCESS TO PUBLISHED MATERIAL                                                                    |
| 82257641     | Granted   | 7966664       | 6/3/2008    | 6/21/2011  | 12/132440          | US | ERROR AND EXCEPTION MESSAGE HANDLING FRAMEWORK                                                                                    |
| 82257644     | Granted   | 8065206       | 7/25/2008   | 11/22/2011 | 12/180039          | US | BYTE-BASED METHOD, PROCESS AND ALGORITHM FOR SERVICE-ORIENTED AND UTILITY INFRASTRUCTURE USAGE MEASUREMENT, METERING, AND PRICING |
|              |           |               |             |            |                    |    | AIRCRAFT STATUS TIMELINE                                                                                                          |
| 82257680     | Published |               | 8/15/2008   |            | 12/192652          | US | GENERATING LOADRUNNER SCRIPTS                                                                                                     |
| 82257686     | Granted   | 8291373       | 8/13/2008   | 10/16/2012 | 12/191160          | US | System For Supply Chain Management Of Virtual Private Network Services                                                            |
| 82257689     | Granted   | 7684321       | 12/17/2002  | 40260      | 10/322322          | US | System For Supply Chain Management Of Virtual Private Network Services                                                            |
| 82257692     | Granted   | 7764700       | 4/27/2007   | 7/27/2010  | 11/790842          | US | System For Supply Chain Management Of Virtual Private Network Services                                                            |
| 82257743     | Published |               | 7/24/2008   |            | 12/179279          | US | SYSTEM AND METHOD FOR ELECTRONIC DATA SECURITY                                                                                    |
| 82257764     | Published |               | 8/14/2008   |            | 12/191968          | US | EXTENDED INSTRUCTION SET ARCHITECTURES                                                                                            |
| 82257815     | Granted   | 8554760       | 10/7/2009   | 10/8/2013  | 12/574911          | US | System And Method For Optimizing Queries                                                                                          |
| 82257824     | Granted   | 9141664       | 8/31/2009   | 42269      | 12/550834          | US | System And Method For Optimizing Queries                                                                                          |
| 82257827     | Granted   | 8380699       | 9/4/2009    | 2/19/2013  | 12/554254          | US | System And Method For Optimizing Queries                                                                                          |

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| 82257932     | Granted   | 6732171       | 5/31/2002   | 5/4/2004   | 10/063992          | US | Distributed Network Storage System With Virtualization                                                 |
| 82257938     | Granted   | 7200664       | 3/29/2004   | 4/3/2007   | 10/708867          | US | Distributed Network Storage System With Virtualization                                                 |
| 82257995     | Published |               | 7/30/2009   |            | 12/512739          | US | Computer-readable Media, Methods And Computer Systems For Designing A Software Application Graphically |
| 82258016     | Published |               | 8/14/2009   |            | 12/541794          | US | System And Method For Inter-domain Information Transfer                                                |
| 82258130     | Published |               | 7/31/2009   |            | 12/533864          | US | Linear Programming Using L1 Minimization To Determine Securities In A Portfolio                        |
| 82258139     | Published |               | 11/6/2009   |            | 12/614260          | US | DETERMINING AT LEAST ONE CATEGORY PATH FOR IDENTIFYING INPUT TEXT                                      |
| 82258181     | Granted   | 8063395       | 9/30/2009   | 40869      | 12/570286          | US | MEMRISTOR AMORPHOUS METAL ALLOY ELECTRODES                                                             |
| 82258193     | Granted   | 8310252       | 10/26/2009  | 11/13/2012 | 12/605441          | US | TESTING A NONVOLATILE CIRCUIT ELEMENT HAVING MULTIPLE INTERMEDIATE STATES                              |
| 82258208     | Granted   | 8493138       | 8/26/2009   | 7/23/2013  | 12/548124          | US | Memcapacitive Devices                                                                                  |
| 82258322     | Granted   | 8676946       | 3/17/2009   | 41716      | 12/406071          | US | WARNINGS FOR LOGICAL-SERVER TARGET HOSTS                                                               |
| 82258325     | Granted   | 8427980       | 7/21/2010   | 4/23/2013  | 12/841039          | US | Methods And Apparatus To Determine And Implement Multidimensional Network Topologies                   |
| 82258328     | Published |               | 8/20/2009   |            | 12/544227          | US | MAP REDUCE AND PARALLEL PROCESSING IN DATABASES                                                        |
| 82258367     | Granted   | 8638799       | 7/10/2009   | 1/28/2014  | 12/501067          | US | Establishing Network Quality Of Service For A Virtual Machine                                          |
| 82258376     | Granted   | 8207593       | 7/28/2009   | 41086      | 12/510589          | US | MEMRISTOR HAVING A NANOSTRUCTURE IN THE SWITCHING MATERIAL                                             |
| 82258379     | Granted   | 8008648       | 7/24/2009   | 8/30/2011  | 12/509299          | US | MEMRISTORS WITH INSULATION ELEMENTS AND METHODS FOR FABRICATING THE SAME                               |
| 82258385     | Granted   | 8193808       | 9/11/2009   | 6/5/2012   | 12/558408          | US | OPTICALLY INTEGRATED BIOSENSOR BASED ON OPTICALLY DETECTED MAGNETIC RESONANCE                          |
| 82258391     | Granted   | 8910153       | 7/13/2009   | 41982      | 12/502074          | US | Managing Virtualized Accelerators Using Admission Control, Load Balancing And Scheduling               |
| 82258394     | Granted   | 8101473       | 7/10/2009   | 1/24/2012  | 12/501259          | US | ROUNDED THREE-DIMENSIONAL GERMANIUM ACTIVE CHANNEL FOR TRANSISTORS AND SENSORS                         |
| 82258439     | Published |               | 7/22/2009   |            | 12/507782          | US | MITIGATING RESOURCE USAGE DURING VIRTUAL STORAGE REPLICATION                                           |
| 82258451     | Granted   | 8850142       | 9/15/2009   | 41912      | 12/560268          | US | ENHANCED VIRTUAL STORAGE REPLICATION                                                                   |
| 82258493     | Granted   | 8904406       | 7/30/2009   | 1/2/2015   | 12/512256          | US | Coordination Of Tasks Executed By A Plurality Of Threads                                               |
| 82258520     | Published |               | 2/13/2010   |            | 12/705584          | US | SYSTEM AND METHOD FOR DETERMINING THE PROVENANCE OF A DOCUMENT                                         |
| 82258565     | Granted   | 8301805       | 11/26/2009  | 41212      | 12/626628          | US | Managing I/O Request In A Storage System                                                               |
| 82258574     | Granted   | 8341704       | 10/30/2009  | 12/25/2012 | 12/610226          | US | Secure Communication Between Client Device And Server Device                                           |
| 82258637     | Granted   | 8235339       | 6/26/2009   | 8/7/2012   | 12/492573          | US | Method And Apparatus For Engaging A Rail With Various Support Structures                               |

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| 82258682     | Published |               | 10/20/2009  |            | 13/258478 US       | US | Data Processing System And Method                                                               |
| 82258700     | Published |               | 10/14/2009  |            | 12/579270 US       | US | Detection Of Network Address Spoofing And False Positioning                                     |
| 82258706     | Granted   | 8210463       | 9/30/2009   | 41093      | 12/571331 US       | US | Avoidance                                                                                       |
| 82258760     | Published |               | 10/9/2009   |            | 13/259436 US       | US | Coatings For Tape Guides                                                                        |
| 82258889     | Published |               | 12/10/2009  |            | 12/635272 US       | US | Method Of Sending A Message Using A Mobile Phone                                                |
| 82258943     | Granted   | 8639651       | 10/30/2009  | 1/28/2014  | 12/609937 US       | US | System And Method For Executing A Query                                                         |
| 82258955     | Granted   | 8321644       | 10/1/2009   | 11/27/2012 | 12/571823 US       | US | Manipulating Environmental Conditions In An Infrastructure                                      |
| 82258958     | Granted   | 8886610       | 10/1/2009   | 11/11/2014 | 12/571922 US       | US | Backing Up Filesystems To A Storage Device                                                      |
| 82258994     | Granted   | 8085801       | 8/8/2009    | 40904      | 12/538116 US       | US | Backup Simulation For Backing Up Filesystems To A Storage Device                                |
| 82259003     | Granted   | 8209567       | 1/28/2010   | 41086      | 12/695780 US       | US | Resource Arbitration                                                                            |
| 82259018     | Granted   | 8259736       | 12/15/2009  | 41156      | 12/638794 US       | US | Message Clustering Of System Event Logs                                                         |
| 82259072     | Granted   | 8694819       | 8/24/2009   | 41737      | 12/461774 US       | US | Selecting A Path Through A Network                                                              |
| 82259075     | Granted   | 8356149       | 10/30/2009  | 1/15/2013  | 12/609173 US       | US | Virtualization Of Real-time Clock                                                               |
| 82259120     | Published |               | 2/16/2010   |            | 12/706154 US       | US | Memory Migration                                                                                |
| 82259126     | Granted   | 8370582       | 1/26/2010   | 2/5/2013   | 12/693742 US       | US | Functional-form Queries                                                                         |
| 82259204     | Published |               | 12/18/2009  |            | 12/642544 US       | US | Merging Subsequent Updates To A Memory Location                                                 |
| 82259246     | Published |               | 7/31/2009   |            | 12/534078 US       | US | Optimization Of An Application Program                                                          |
| 82259309     | Granted   | 8566287       | 3/29/2010   | 41569      | 12/748467 US       | US | Method And Apparatus For Option-based Marking Of A DHCP Packet                                  |
| 82259372     | Published |               | 10/30/2009  |            | 12/610208 US       | US | Method And Apparatus For Scheduling Data Backups                                                |
| 82259390     | Granted   | 8431474       | 9/25/2009   | 4/30/2013  | 12/567537 US       | US | Performance Of First And Second Macros While Data Is Moving Through Hardware Pipeline           |
| 82259396     | Granted   | 8258050       | 7/17/2009   | 9/4/2012   | 12/505377 US       | US | Three Dimensional Multilayer Circuit                                                            |
| 82259435     | Granted   | 8392168       | 11/3/2009   | 3/5/2013   | 12/611213 US       | US | Method Of Making Light Trapping Crystalline Structures                                          |
| 82259441     | Granted   | 9003003       | 9/15/2009   | 4/7/2015   | 12/559849 US       | US | SIMULATING AN APPLICATION DURING A SAMPLING PERIOD AND A NON-SAMPLING PERIOD                    |
| 82259444     | Granted   | 8448860       | 2/28/2010   | 5/28/2013  | 12/714513 US       | US | Managing Computer Resources                                                                     |
| 82259555     | Granted   | 8463784       | 8/7/2009    | 41436      | 12/537614 US       | US | System And Method For Determining Asset Location In A Rack                                      |
| 82259561     | Granted   | 8374982       | 1/14/2010   | 2/12/2013  | 12/687458 US       | US | IMPROVING DATA CLUSTERING STABILITY                                                             |
| 82259564     | Published |               | 4/30/2010   |            | 12/771868 US       | US | System And Method For Constructing Forecasting Models                                           |
| 82259570     | Granted   | 8676859       | 1/21/2010   | 41716      | 12/691101 US       | US | METHOD AND SYSTEM FOR LOGGING TRACE EVENTS OF A NETWORK DEVICE                                  |
| 82259615     | Published |               | 11/22/2009  |            | 12/623428 US       | US | Method And System For Analyzing Data Stored In A Database                                       |
| 82259618     | Published |               | 11/6/2009   |            | 12/613537 US       | US | Routing Packet From First Virtual Machine To Second Virtual Machine Of A Computing Device       |
|              |           |               |             |            |                    |    | A Storage System With A Memory Blade That Generates A Computational Result For A Storage Device |

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| 82259621     | Published |               | 8/6/2009    |            | 12/536498          | US | Building User Profiles For Website Personalization                                        |
| 82259624     | Granted   | 8739130       | 10/29/2009  | 41786      | 12/608096          | US | Quality Assurance Testing                                                                 |
| 82259627     | Granted   | 8683445       | 10/28/2009  | 41723      | 12/607781          | US | User-interface Testing                                                                    |
| 82259633     | Published |               | 12/3/2009   |            | 12/629907          | US | CLICKSTREAMS AND WEBSITE CLASSIFICATION                                                   |
| 82259645     | Granted   | 8762304       | 1/4/2010    | 41814      | 12/651765          | US | Policy Scheduling                                                                         |
| 82259684     | Granted   | 8555253       | 11/2/2009   | 41555      | 12/611065          | US | System And Method For Monitoring Exploratory Testing Of A Plurality Of Testers            |
| 82259693     | Published |               | 2/13/2010   |            | 12/705586          | US | SYSTEM AND METHOD FOR IDENTIFYING FRESH INFORMATION IN A DOCUMENT SET                     |
| 82259696     | Published |               | 6/7/2010    |            | 12/795580          | US | VISUAL DISPLAY OF DATA FROM A PLURALITY OF DATA SOURCES                                   |
| 82259702     | Allowed   |               | 11/8/2009   |            | 12/614432          | US | Outlier Data Point Detection                                                              |
| 82259744     | Published |               | 2/13/2010   |            | 12/705585          | US | SYSTEM AND METHOD FOR DISPLAYING DOCUMENTS                                                |
| 82259750     | Published |               | 10/30/2009  |            | 12/588856          | US | A SYSTEM AND METHOD FOR MINIMIZING POWER CONSUMPTION FOR A WORKLOAD IN A DATA CENTER      |
| 82259831     | Granted   | 8472761       | 11/30/2009  | 6/25/2013  | 12/628028          | US | WAVEGUIDE SYSTEMS AND METHODS                                                             |
| 82259882     | Granted   | 8310100       | 4/16/2010   | 11/13/2012 | 12/762035          | US | System And Method For A Redundant Power Solution                                          |
| 82259933     | Published |               | 1/28/2010   |            | 12/695261          | US | Method And Apparatus For Random Access Of Data Stored In A Sequential Manner              |
| 82259942     | Granted   | 8660994       | 1/28/2010   | 41695      | 12/695285          | US | Selective Data Deduplication                                                              |
| 82259945     | Granted   | 8427285       | 4/29/2010   | 4/23/2013  | 12/770207          | US | Configurable Control Of Data Storage Device Visual Indicators In A Server Computer System |
| 82259948     | Published |               | 1/29/2010   |            | 12/696277          | US | SYSTEM AND METHOD FOR GENERATING ENTERPRISE APPLICATIONS                                  |
| 82259951     | Granted   | 8589475       | 1/28/2010   | 41597      | 12/695622          | US | MODELING A CLOUD COMPUTING SYSTEM                                                         |
| 82259993     | Published |               | 5/28/2011   |            | 13/118408          | US | PRIORITIZATION FOR PRODUCT MANAGEMENT                                                     |
| 82260002     | Granted   | 8978900       | 5/18/2010   | 42080      | 12/782327          | US | BULK RAIL BRACKET                                                                         |
| 82260011     | Granted   | 8174824       | 12/22/2009  | 5/8/2012   | 12/645372          | US | ENCLOSURE WITH ACCESS PANEL                                                               |
| 82260020     | Granted   | 8819028       | 12/14/2009  | 8/26/2014  | 13/258482          | US | System And Method For Web Content Extraction                                              |
| 82260059     | Granted   | 8351324       | 5/29/2010   | 1/8/2013   | 12/790802          | US | Analyzing Service Impacts On Virtual Private Networks                                     |
| 82260062     | Published |               | 10/29/2010  |            | 12/916043          | US | ASSESSING HEALTH OF PROJECTS                                                              |
| 82260125     | Published |               | 2/12/2010   |            | 12/7704779         | US | Computer-based Project Management                                                         |
| 82260137     | Granted   | 8526177       | 5/4/2010    | 9/3/2013   | 12/773629          | US | FAN FOR COOLING MULTIPLE PROCESSORS HOUSED IN A SUB-CHASSIS                               |
| 82260143     | Granted   | 8392393       | 2/12/2010   | 3/5/2013   | 12/704770          | US | GRAPH SEARCHING                                                                           |
| 82260245     | Granted   | 8586959       | 4/28/2010   | 41597      | 12/769557          | US | MEMRISTIVE SWITCH DEVICE                                                                  |
| 82260269     | Granted   | 8515223       | 7/30/2010   | 8/20/2013  | 12/847844          | US | LENS                                                                                      |
| 82260302     | Granted   | 8391656       | 7/29/2010   | 41338      | 12/846740          | US | GRATING COUPLED CONVERTER                                                                 |
| 82260317     | Allowed   |               | 1/29/2010   |            | 12/696524          | US | NANOSCALE SWITCHING DEVICE                                                                |
| 82260320     | Granted   | 8120071       | 1/11/2010   | 40960      | 12/685494          | US | MEMFET RAM                                                                                |

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| 82260323     | Granted     | 8842363       | 1/29/2010   | 9/23/2014  | 12/696682          | US | DYNAMICALLY VARYING AN OPTICAL CHARACTERISTIC OF LIGHT BY A SUB-WAVELENGTH GRATING                       |
| 82260329     | Granted     | 8175430       | 1/29/2010   | 5/8/2012   | 12/696958          | US | OPTICAL MULTIPLEXER/DEMULTIPLEXER SYSTEMS CONFIGURED WITH NON-PERIODIC GRATINGS                          |
| 82260377     | Granted     | 8595362       | 12/10/2009  | 41604      | 12/635598          | US | Managing Hardware Resources For Soft Partitioning                                                        |
| 82260446     | Published   | 5/10/2010     |             |            | 12/776740          | US | EDGE LINK DISCOVERY                                                                                      |
| 82260449     | Granted     | 8688838       | 12/14/2009  | 4/1/2014   | 12/637532          | US | Profile Management Systems                                                                               |
| 82260452     | Published   |               | 1/20/2010   |            | 12/690819          | US | Bus Arbitration For Sideband Signals                                                                     |
| 82260515     | Published   |               | 12/15/2009  |            | 12/637786          | US | REDUNDANT, FAULT-TOLERANT MANAGEMENT FABRIC FOR MULTIPARTITION SERVERS                                   |
| 82260518     | Granted     | 9001510       | 1/27/2010   | 42101      | 12/694887          | US | System And Method For Positioning A Midplane Within A Computer Chassis                                   |
| 82260554     | Granted     | 8122291       | 1/24/2010   | 40960      | 12/691512          | US | METHOD AND SYSTEM OF ERROR LOGGING                                                                       |
| 82260557     | Granted     | 8161324       | 12/17/2009  | 41016      | 12/641091          | US | ANALYSIS RESULT STORED ON A FIELD REPLACEABLE UNIT                                                       |
| 82260560     | Published   |               | 12/17/2009  |            | 12/641001          | US | Resource Fault Management For Partitions                                                                 |
| 82260572     | Granted     | 8429602       | 3/12/2010   | 4/23/2013  | 12/723459          | US | IDENTIFICATION OF USER INTERFACE CONTROLS                                                                |
| 82260620     | Granted     | 8407447       | 12/16/2009  | 41359      | 12/639335          | US | DYNAMICALLY REALLOCATING COMPUTING COMPONENTS BETWEEN PARTITIONS                                         |
| 82260638     | Published   |               | 1/27/2010   |            | 12/694954          | US | METHOD AND SYSTEM OF EMULATING DEVICES ACROSS SELECTED COMMUNICATION PATHWAYS THROUGH A TERMINAL SESSION |
| 82260641     | Application |               | 1/26/2010   |            | 12/693925          | US | COMPUTER DATA ARCHIVE OPERATIONS                                                                         |
| 82260677     | Granted     | 8976499       | 4/27/2010   | 42073      | 12/768242          | US | E-fuse System For Supplying Current To A Load Along More Than One Path                                   |
| 82260692     | Published   |               | 2/16/2011   |            | 13/028233          | US | Method For Determining Network Topology                                                                  |
| 82260704     | Published   |               | 3/30/2010   |            | 12/798257          | US | Generalized Scatter Plots                                                                                |
| 82260746     | Published   |               | 1/28/2010   |            | 12/695963          | US | WAVELET COMPRESSION WITH BOOTSTRAP SAMPLING                                                              |
| 82260749     | Granted     | 8260768       | 1/29/2010   | 9/4/2012   | 12/697093          | US | Transformation Of Directed Acyclic Graph Query Plans To Linear Query Plans                               |
| 82260752     | Granted     | 8719722       | 3/10/2010   | 5/6/2014   | 12/721431          | US | PRODUCING A REPRESENTATION OF PROGRESS OF A DATABASE PROCESS                                             |
| 82260755     | Granted     | 8745038       | 2/25/2010   | 6/3/2014   | 12/712943          | US | Optimization Of Integration Flow Plans                                                                   |
| 82260764     | Granted     | 8621058       | 4/27/2011   | 41639      | 13/095219          | US | Providing Cloud-Based Computing Services                                                                 |
| 82260767     | Granted     | 8973000       | 5/11/2010   | 42066      | 12/777401          | US | Determining Multiprogramming Levels                                                                      |
| 82260872     | Granted     | 8457806       | 5/28/2010   | 6/4/2013   | 12/790436          | US | Managing An Infrastructure Having A 3D Package And Cooling Resource Actuators                            |
| 82260881     | Granted     | 8401925       | 1/26/2010   | 3/19/2013  | 12/694181          | US | SOFTWARE PRODUCT LICENSING                                                                               |
| 82260941     | Granted     | 8312126       | 3/1/2010    | 11/13/2012 | 12/715056          | US | Managing At Least One Computer Node                                                                      |
| 82261007     | Granted     | 8909603       | 2/15/2010   | 12/9/2014  | 12/705635          | US | Backing Up Objects To A Storage Device                                                                   |
| 82261013     | Granted     | 8228794       | 2/3/2010    | 7/24/2012  | 12/699616          | US | Minimizing Pathological Flooding Of A Network                                                            |

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| 82261052     | Granted   | 8352085       | 4/29/2010   | 41282      | 12/770186          | US | Distribution Of Cooling Resources Using Hierarchically Identified Cooling Microgrids               |
| 82261061     | Granted   | 8478709       | 3/8/2010    | 7/2/2013   | 12/719198          | US | Evaluation Of Client Status For Likelihood Of Churn                                                |
| 82261067     | Allowed   |               | 6/24/2010   |            | 12/822438          | US | FORWARDING BROADCAST TRAFFIC TO A HOST ENVIRONMENT                                                 |
| 82261115     | Granted   | 8984257       | 4/6/2010    | 3/17/2015  | 12/755083          | US | Managing Sensor And Actuator Data For A Processor And Service Processor Located On A Common Socket |
| 82261121     | Granted   | 8086765       | 4/29/2010   | 12/27/2011 | 12/769897          | US | Direct I/O Device Access By A Virtual Machine With Memory Managed Using Memory Disaggregation      |
| 82261124     | Granted   | 8364909       | 1/25/2010   | 41303      | 12/692792          | US | Determining A Conflict In Accessing Shared Resources Using Reduced Number Of Cycles                |
| 82261130     | Granted   | 8452867       | 8/2/2010    | 5/28/2013  | 12/848664          | US | System And Methods For Network And Server Power Management                                         |
| 82261139     | Granted   | 8392761       | 3/31/2010   | 41338      | 12/751005          | US | Memory Checkpointing Using A Co-located Processor And Service Processor                            |
| 82261193     | Granted   | 8656452       | 7/20/2010   | 41688      | 12/840185          | US | Data Assurance                                                                                     |
| 82261196     | Granted   | 8239863       | 6/29/2010   | 8/7/2012   | 12/826195          | US | Method And System For Migrating A Virtual Machine                                                  |
| 82261199     | Granted   | 8665748       | 4/2/2010    | 3/4/2014   | 12/753755          | US | Method For Energy Efficient Configuration Of Ports Of A Logical Communication Channel              |
| 82261202     | Published |               | 12/29/2009  |            | 12/648405          | US | SYSTEM AND METHOD FOR NEGOTIATING A SALE                                                           |
| 82261247     | Granted   | 8247060       | 4/30/2010   | 41142      | 12/771994          | US | A Flexible Metamaterial Structure Based On Graphene Structures                                     |
| 82261250     | Published |               | 8/25/2010   |            | 12/862956          | US | SYSTEM AND METHOD FOR EXTRACT, TRANSFORM, AND LOAD WORKFLOW GENERATION                             |
| 82261265     | Granted   | 8661014       | 9/23/2010   | 2/25/2014  | 12/888429          | US | Stream Processing By A Query Engine                                                                |
| 82261301     | Published |               | 4/27/2010   |            | 12/768174          | US | Dynamic Collaborative Adaptation Of A Business Activity In Business Activity Management System     |
| 82261307     | Published |               | 4/22/2010   |            | 12/765471          | US | RESOURCE MATCHING                                                                                  |
| 82261316     | Granted   | 8664940       | 10/12/2010  | 3/4/2014   | 12/902480          | US | GRAPHITE-BASED SENSOR                                                                              |
| 82261319     | Granted   | 8203837       | 3/31/2010   | 41079      | 12/751189          | US | Cooling System                                                                                     |
| 82261331     | Granted   | 8237539       | 10/7/2010   | 41128      | 12/899759          | US | THERMISTOR                                                                                         |
| 82261364     | Granted   | 8732094       | 7/30/2010   | 41779      | 12/847763          | US | Enforcement Of Security Requirements For A Business Model                                          |
| 82261385     | Granted   | 8832651       | 3/30/2010   | 9/9/2014   | 12/750371          | US | Central Service Provisioning System                                                                |
| 82261430     | Published |               | 6/4/2010    |            | 12/794552          | US | Quality Of Service Control                                                                         |
| 82261433     | Granted   | 8375194       | 5/27/2010   | 2/12/2013  | 12/788706          | US | SYSTEM AND METHOD FOR FREEING MEMORY                                                               |
| 82261490     | Granted   | 7902869       | 4/30/2010   | 3/8/2011   | 12/771135          | US | EXTENSIBLE THREE DIMENSIONAL CIRCUIT                                                               |
| 82261502     | Granted   | 8351234       | 4/29/2010   | 1/8/2013   | 12/770539          | US | EXTENSIBLE THREE DIMENSIONAL CIRCUIT HAVING PARALLEL ARRAY CHANNELS                                |

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| 82261505     | Granted   | 8930525       | 4/27/2010   | 1/6/2015   | 12/7/68451         | US | Method And Apparatus For Measuring Business Transaction Performance                                 |
| 82261517     | Granted   | 8542518       | 3/31/2010   | 9/24/2013  | 12/7/51437         | US | PHOTO-RESPONSIVE MEMORY RESISTOR AND METHOD OF OPERATION                                            |
| 82261556     | Granted   | 8935307       | 4/29/2003   | 1/13/2015  | 10/4/25927         | US | INDEPENDENT DATA ACCESS IN A SEGMENTED FILE SYSTEM                                                  |
| 82261568     | Granted   | D631480       | 3/19/2010   | 1/25/2011  | 29/357979          | US | Computer Having A Front Bezel                                                                       |
| 82261580     | Granted   | 7769711       | 5/30/2007   | 8/3/2010   | 11/7/55649         | US | Migration Of Control In A Distributed Segmented File System                                         |
| 82261613     | Granted   | 7464125       | 6/14/2005   | 12/9/2008  | 11/1/52996         | US | Checking The Validity Of Blocks And Backup Duplicates Of Blocks During Block Reads                  |
| 82261616     | Granted   | 7430570       | 4/28/2004   | 9/30/2008  | 10/8/33924         | US | Shadow Directory Structure In A Distributed Segmented File System                                   |
| 82261619     | Granted   | 8316066       | 8/20/2007   | 41233      | 11/8/41552         | US | Shadow Directory Structure In A Distributed Segmented File System                                   |
| 82261622     | Granted   | 8131782       | 9/29/2008   | 3/6/2012   | 12/2/40873         | US | Shadow Directory Structure In A Distributed Segmented File System                                   |
| 82261628     | Granted   | 7546319       | 4/28/2004   | 6/9/2009   | 10/8/33355         | US | File System Consistency Checking In A Distributed Segmented File System                             |
| 82261631     | Granted   | 8103639       | 5/5/2009    | 1/24/2012  | 12/4/35958         | US | File System Consistency Checking In A Distributed Segmented File System                             |
| 82261637     | Granted   | 7650341       | 12/22/2006  | 1/19/2010  | 11/615534          | US | DATA BACKUP/RECOVERY                                                                                |
| 82261700     | Granted   | 8184394       | 4/20/2010   | 5/22/2012  | 12/7/63682         | US | Transducer Head Assemblies And Modules                                                              |
| 82261748     | Granted   | 8554746       | 8/18/2010   | 10/8/2013  | 12/8/59220         | US | MULTIPLE-SOURCE DATA COMPRESSION                                                                    |
| 82261751     | Granted   | 8587985       | 10/1/2010   | 11/19/2013 | 12/8/96641         | US | MEMORY ARRAY WITH GRADED RESISTANCE LINES                                                           |
| 82261754     | Published |               | 6/2/2010    |            | 12/7/92535         | US | COMPRESSING DATA IN A WIRELESS NETWORK                                                              |
| 82261760     | Granted   | 8259485       | 8/31/2010   | 41156      | 12/8/3084          | US | MULTILAYER STRUCTURES HAVING MEMORY ELEMENTS WITH VARIED RESISTANCE OF SWITCHING LAYERS             |
| 82261766     | Granted   | 8204887       | 8/27/2010   | 6/19/2012  | 12/8/70129         | US | SYSTEM AND METHOD FOR SUBSEQUENCE MATCHING                                                          |
| 82261808     | Granted   | 8997084       | 4/20/2011   | 42094      | 13/090270          | US | METHOD AND APPARATUS FOR DETERMINING COMPATIBLE VERSIONS OF DEPENDENT ENTITIES IN A COMPUTER SYSTEM |
| 82261814     | Granted   | 8943328       | 1/29/2010   | 1/27/2015  | 12/6/96799         | US | KEY ROTATION FOR ENCRYPTED STORAGE MEDIA                                                            |
| 82261817     | Granted   | 9032218       | 1/29/2010   | 42136      | 12/6/97045         | US | KEY ROTATION FOR ENCRYPTED STORAGE MEDIA USING A MIRRORED VOLUME REVIVE OPERATION                   |
| 82261925     | Granted   | 8451666       | 5/26/2010   | 41422      | 12/7/87857         | US | READING A MEMORY ELEMENT WITHIN A CROSSBAR ARRAY                                                    |
| 82261928     | Granted   | 8570785       | 5/26/2010   | 10/29/2013 | 12/7/88161         | US | READING A MEMORY ELEMENT WITHIN A CROSSBAR ARRAY                                                    |
| 82261931     | Allowed   |               | 12/14/2010  |            | 12/9/67899         | US | MANAGING SHARED MEMORY                                                                              |

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| 82262000     | Granted   | 9063715       | 6/10/2010   | 6/23/2015  | 12/813012          | US | Management Of A Virtual Power Infrastructure                                                 |
| 82262012     | Published |               | 7/1/2010    |            | 12/828596          | US | Provisioning Of Cooling Resources Through A Delivery Apparatus                               |
| 82262015     | Granted   | 8620945       | 9/23/2010   | 12/31/2013 | 12/888427          | US | A Query Rewind Mechanism For Processing A Continuous Stream Of Data                          |
| 82262063     | Granted   | 8738656       | 8/23/2010   | 41786      | 12/861736          | US | Method And System For Processing A Group Of Resource Identifiers                             |
| 82262114     | Granted   | 8294132       | 3/30/2010   | 10/23/2012 | 12/750351          | US | GRAPHENE MEMRISTOR HAVING MODULATED GRAPHENE INTERLAYER CONDUCTION                           |
| 82262135     | Granted   | 8261038       | 4/22/2010   | 9/4/2012   | 12/765367          | US | Method And System For Allocating Storage Space                                               |
| 82262198     | Granted   | 8279619       | 3/25/2010   | 10/2/2012  | 12/731687          | US | POINT OF LOAD (POL) POWER SUPPLY SYSTEMS WITH REPLACEMENT MODULE                             |
| 82262255     | Published |               | 3/29/2010   |            | 12/748924          | US | Electronic Device And Method                                                                 |
| 82262261     | Published |               | 5/25/2010   |            | 12/786899          | US | MULTI-ATTRIBUTE SYSTEM FOR PROJECT PLANNING                                                  |
| 82262264     | Granted   | 8892490       | 9/22/2010   | 11/18/2014 | 12/887965          | US | DETERMINING WHETHER A POINT IN A DATA STREAM IS AN OUTLIER USING HIERARCHICAL TREES          |
| 82262300     | Granted   | 9002830       | 7/12/2010   | 4/7/2015   | 12/834592          | US | Determining Reliability Of Electronic Documents Associated With Events                       |
| 82262318     | Granted   | 8239349       | 10/7/2010   | 8/7/2012   | 12/900133          | US | EXTRACTING DATA                                                                              |
| 82262324     | Published |               | 5/27/2010   |            | 12/788459          | US | DETERMINING WHETHER A COMPOSITE CONFIGURATION ITEM SATISFIES A COMPLIANCE RULE               |
| 82262366     | Granted   | 8392571       | 4/30/2010   | 3/5/2013   | 12/771059          | US | Method And System For Allocating Bandwidth                                                   |
| 82262372     | Granted   | 8903833       | 6/4/2010    | 12/2/2014  | 12/794621          | US | OBJECT IDENTIFICATION BY ELECTOR                                                             |
| 82262381     | Granted   | 9053241       | 6/11/2010   | 6/9/2015   | 12/814345          | US | SCRIPTING APPLICATION WITH ROLE IDENTIFICATION                                               |
| 82262384     | Published |               | 7/2/2010    |            | 12/830233          | US | Rule Based Automation                                                                        |
| 82262390     | Granted   | 8621486       | 6/30/2010   | 12/31/2013 | 12/827134          | US | SIGNIFICANCE LEVEL AUTOMATION                                                                |
| 82262393     | Granted   | 8443292       | 6/11/2010   | 5/14/2013  | 12/814364          | US | SCRIPTING APPLICATION WITH PRIVACY MODE COORDINATION                                         |
| 82262426     | Published |               | 6/14/2010   |            | 12/815203          | US | REUSABLE CAPACITY PLANNING SCENARIO TEMPLATES                                                |
| 82262429     | Published |               | 6/14/2010   |            | 12/815194          | US | PERSONALIZED CAPACITY PLANNING SCENARIOS USING REUSABLE CAPACITY PLANNING SCENARIO TEMPLATES |
| 82262447     | Granted   | 8489827       | 10/28/2010  | 7/16/2013  | 12/914079          | US | Method and System for Storage-System Management                                              |
| 82262453     | Granted   | 8532495       | 7/23/2010   | 41527      | 12/842282          | US | METHOD FOR ENERGY EFFICIENT PULSING OPERATION OF TRANSCIEVERS OF A NETWORKED DEVICE          |
| 82262492     | Granted   | 8531956       | 5/29/2010   | 9/10/2013  | 12/790814          | US | Channel Assignment For A Wireless Network                                                    |
| 82262507     | Granted   | 8924791       | 8/30/2010   | 12/30/2014 | 12/871582          | US | System Including A Vendor Computer System For Testing Software Products In A Cloud Network   |
| 82262552     | Allowed   |               | 9/20/2010   |            | 12/885587          | US | METHODS AND APPARATUS TO MANAGE SYSTEM PERFORMANCE INFORMATION                               |

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| 82262579     | Published |               | 3/16/2010   |            | 12/725361          | US | OPTIMIZATION OF A RESOURCE MATCHING MODEL BY MAPPING A MODEL TO A BIPARTITE GRAPH                                   |
| 82262627     | Granted   | 8395917       | 6/17/2010   | 3/12/2013  | 12/817750          | US | REDUNDANT PARALLEL NON-ISOLATED INPUT CONVERTERS                                                                    |
| 82262639     | Granted   | 8391717       | 5/24/2010   | 3/5/2013   | 12/785962          | US | Flow-control Methods And Systems For Multibus Systems                                                               |
| 82262702     | Granted   | 8654550       | 6/17/2010   | 2/18/2014  | 12/817716          | US | Circulating Current Detection For Redundant Power Supplies                                                          |
| 82262738     | Granted   | 8972455       | 10/19/2010  | 42066      | 12/907730          | US | SYSTEM AND METHOD FOR TRAFFIC SURGE CONTROL                                                                         |
| 82262750     | Published |               | 7/30/2010   |            | 12/847907          | US | MEMORY DEVICE ALTERING PERFORMANCE CHARACTERISTICS BASED ON BANDWIDTH DEMAND                                        |
| 82262822     | Published |               | 9/16/2010   |            | 12/883992          | US | INTEGRATING USER INTERFACE COMPONENTS                                                                               |
| 82262867     | Published |               | 6/22/2010   |            | 12/821079          | US | METHOD AND SYSTEM FOR PREDICTIVE DESIGNATED ROUTER HANDOVER IN A MULTICAST NETWORK                                  |
| 82262948     | Granted   | 8396953       | 3/12/2010   | 3/12/2013  | 12/723168          | US | PROCESSING PACKETS USING A VIRTUALIZED DESCRIPTOR QUEUE                                                             |
| 82262951     | Granted   | 8171349       | 6/18/2010   | 5/1/2012   | 12/818582          | US | Associating A Monitoring Manager With An Executable Service In A Virtual Machine Migrated Between Physical Machines |
| 82262987     | Granted   | 8149145       | 8/5/2010    | 4/3/2012   | 12/851409          | US | Method And Apparatus For Adaptive Lossless Data Compression                                                         |
| 82262996     | Published |               | 7/9/2010    |            | 12/833080          | US | COOLING SYSTEMS AND METHODS                                                                                         |
| 82263008     | Granted   | 8626476       | 8/31/2010   | 41646      | 12/872032          | US | DETERMINING THE IMPACT OF ELEMENTS IN A TECHNOLOGY SYSTEM                                                           |
| 82263050     | Granted   | 8850321       | 6/23/2010   | 41912      | 12/821457          | US | CROSS-DOMAIN BUSINESS SERVICE MANAGEMENT                                                                            |
| 82263065     | Published |               | 8/27/2010   |            | 12/870428          | US | CORRELATION OF METRICS MONITORED FROM A VIRTUAL ENVIRONMENT                                                         |
| 82263071     | Published |               | 3/29/2010   |            | 12/749473          | US | Method And System For Efficient Snapshotting Of Data-Objects                                                        |
| 82263077     | Granted   | 8433685       | 8/18/2010   | 4/30/2013  | 12/859130          | US | METHOD AND SYSTEM FOR PARITY-PAGE DISTRIBUTION AMONG NODES OF A MULTI-NODE DATA-STORAGE SYSTEM                      |
| 82263119     | Granted   | 8819286       | 10/19/2010  | 41877      | 12/907173          | US | METHODS, SYSTEMS, AND APPARATUS FOR PROCESSING MESSAGING DATA SETS USING STRUCTURED DATA SETS                       |
| 82263128     | Published |               | 10/4/2010   |            | 12/897678          | US | METHOD AND SYSTEM FOR DEPLOYING APPLICATION COMPONENTS IN A PARTIAL DEPLOYMENT                                      |
| 82263131     | Granted   | 8909053       | 6/24/2010   | 12/9/2014  | 12/822934          | US | Tenant Isolation In A Multi-tenant Cloud System                                                                     |
| 82263137     | Granted   | 8539059       | 6/2/2010    | 9/17/2013  | 12/792400          | US | MANAGING COOLING DEVICES AND COMPUTING NODES IN AN                                                                  |
| 82263176     | Published |               | 6/7/2010    |            | 12/795191          | US | INFRASTRUCTURE MANAGING A NETWORK SYSTEM                                                                            |
| 82263182     | Published |               | 10/28/2010  |            | 12/913873          | US | PROVIDING A STATUS INDICATION FOR A PROJECT                                                                         |

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| 82263185     | Published |               | 8/27/2010   |            | 12/870006          | US | IDENTIFYING AN INDIVIDUAL IN RESPONSE TO A QUERY SEEKING TO LOCATE PERSONNEL WITH PARTICULAR EXPERIENCE                    |
| 82263188     | Published |               | 10/28/2010  |            | 12/913870          | US | IDENTIFYING A CANDIDATE ACTION FOR AN ISSUE                                                                                |
| 82263191     | Published |               | 8/24/2010   |            | 12/862216          | US | INTERACTIVE LAYERED VISUALIZATION OF A LAYERED SOFTWARE ARCHITECTURE                                                       |
| 82263194     | Published |               | 9/7/2010    |            | 12/876651          | US | TEST PLANNING TOOL FOR SOFTWARE UPDATES                                                                                    |
| 82263299     | Granted   | 8392805       | 7/15/2010   | 3/5/2013   | 12/837085          | US | NON-MDS ERASURE CODES FOR STORAGE SYSTEMS                                                                                  |
| 82263302     | Granted   | 8458513       | 7/30/2010   | 6/4/2013   | 12/847203          | US | EFFICIENT FAILURE RECOVERY IN A DISTRIBUTED DATA STORAGE SYSTEM                                                            |
| 82263314     | Granted   | 8805766       | 10/19/2010  | 8/12/2014  | 12/907181          | US | METHODS AND SYSTEMS FOR MODIFYING A KNOWLEDGE BASE SYSTEM                                                                  |
| 82263371     | Published |               | 10/8/2010   |            | 12/901156          | US | PROCESSING CHANGE DATA                                                                                                     |
| 82263380     | Published |               | 10/28/2010  |            | 12/914299          | US | GENERATING PROGRESSIVE QUERY RESULTS                                                                                       |
| 82263383     | Published |               | 6/15/2010   |            | 12/815732          | US | System And Method For Designing And Displaying Advertisements                                                              |
| 82263386     | Granted   | 8324976       | 4/1/2011    | 12/4/2012  | 13/078595          | US | OSCILLATOR CIRCUITRY HAVING NEGATIVE DIFFERENTIAL RESISTANCE                                                               |
|              |           |               |             |            |                    |    |                                                                                                                            |
| 82263488     | Published |               | 10/7/2010   |            | 12/924870          | US | Visualizing Motifs with Visual Structures                                                                                  |
| 82263512     | Granted   | 8385101       | 7/30/2010   | 2/26/2013  | 12/847874          | US | MEMORY RESISTOR HAVING PLURAL DIFFERENT ACTIVE MATERIALS                                                                   |
| 82263551     | Published |               | 10/25/2010  |            | 12/911389          | US | PROVIDING BUSINESS INTELLIGENCE                                                                                            |
| 82263569     | Granted   | 9018797       | 5/28/2010   | 42122      | 12/790514          | US | Power Distribution Management                                                                                              |
| 82263614     | Granted   | 8824665       | 10/11/2010  | 41884      | 12/901736          | US | Unshielded Twisted Pair Termination Circuit                                                                                |
| 82263617     | Granted   | 8537846       | 4/27/2010   | 9/17/2013  | 12/768722          | US | Dynamic Priority Queue Level Assignment For A Network Flow                                                                 |
| 82263620     | Granted   | 8396936       | 10/28/2010  | 3/12/2013  | 12/914889          | US | Computer System with Cooperative Cache                                                                                     |
| 82263623     | Granted   | 8537669       | 4/27/2010   | 9/17/2013  | 12/768723          | US | Priority Queue Level Optimization For A Network Flow                                                                       |
| 82263626     | Published |               | 9/3/2010    |            | 12/807378          | US | Visual Representation Of A Cell-based Calendar Transparently Overlaid With Event Visual Indicators For Mining Data Records |
| 82263629     | Granted   | 8391289       | 10/29/2010  | 3/5/2013   | 12/915509          | US | MANAGING A FORWARDING TABLE IN A SWITCH                                                                                    |
| 82263635     | Granted   | 8458547       | 10/26/2010  | 6/4/2013   | 12/912688          | US | Method For Constructing A Histogram                                                                                        |
| 82263698     | Granted   | 8424826       | 10/12/2010  | 41387      | 12/902824          | US | ATTACHMENT APPARATUS FOR AN EXTERNAL POWER SUPPLY                                                                          |
| 82263761     | Granted   | 8135979       | 6/24/2010   | 40981      | 12/822275          | US | COLLECTING NETWORK-LEVEL PACKETS INTO A DATA STRUCTURE IN RESPONSE TO AN ABNORMAL CONDITION                                |
| 82263800     | Granted   | 8648491       | 9/28/2010   | 2/11/2014  | 12/892300          | US | PASSIVE IMPEDANCE MATCHING                                                                                                 |

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| 82263809     | Granted   | 8744631       | 1/28/2011   | 6/3/2014   | 13/016278          | US | MANIPULATING ENVIRONMENTAL CONDITIONS IN AN INFRASTRUCTURE            |
| 82263821     | Published |               | 9/24/2010   |            | 12/889709          | US | Reimaging A Multi-Node Storage System                                 |
| 82263863     | Published |               | 10/25/2010  |            | 12/911356          | US | DISTRIBUTED DATABASE SYNCHRONIZATION                                  |
| 82263887     | Published |               | 10/15/2010  |            | 12/905735          | US | PREDICTING FUTURE OUTCOMES                                            |
| 82263890     | Published |               | 7/30/2010   |            | 12/847066          | US | Method And System For Processing Unified State Change Notifications   |
| 82264001     | Granted   | 8818974       | 10/27/2010  | 41877      | 12/913561          | US | SYSTEM AND METHOD FOR SYNCHRONOUSLY UPDATING A HIERARCHY BRIDGE TABLE |
| 82264076     | Granted   | 8769505       | 1/24/2011   | 41821      | 13/012457          | US | EVENT INFORMATION RELATED TO SERVER REQUEST PROCESSING                |
| 82264130     | Published |               | 10/27/2010  |            | 12/913486          | US | SYNCHRONIZED FIRMWARE UPDATE                                          |
| 82264133     | Granted   | 8443365       | 11/3/2010   | 41408      | 12/938987          | US | METHODS AND SYSTEMS TO CLONE A VIRTUAL MACHINE INSTANCE               |
| 82264175     | Granted   | 8271312       | 8/25/2010   | 41170      | 12/868645          | US | INTRODUCING REVENUE-GENERATING FEATURES                               |
| 82264178     | Granted   | 8356141       | 6/28/2010   | 1/15/2013  | 12/825163          | US | IDENTIFYING REPLACEMENT MEMORY PAGES FROM THREE PAGE RECORD LISTS     |
| 82264181     | Published |               | 10/19/2010  |            | 12/907605          | US | MANAGING SETTINGS OF COMPUTING DEVICES                                |
| 82264238     | Granted   | 8260826       | 10/19/2010  | 9/4/2012   | 12/907940          | US | Data Processing System And Method                                     |
| 82264262     | Granted   | 8627311       | 2/1/2011    | 41646      | 13/019052          | US | SYSTEMS, METHODS, AND APPARATUS TO DEPLOY SOFTWARE                    |
| 82264265     | Granted   | 8479034       | 8/9/2010    | 41457      | 12/853148          | US | Method For Controlling The Power Usage Of A Computer                  |
| 82264298     | Published |               | 10/28/2010  |            | 12/914418          | US | TIME TRACKING SYSTEMS AND METHODS                                     |
| 82264310     | Granted   | 8549482       | 12/15/2010  | 10/1/2013  | 12/969378          | US | DISPLAYING SUBTITLES                                                  |
| 82264316     | Published |               | 1/11/2011   |            | 13/004743          | US | METHODS AND APPARATUS TO GENERATE A WIZARD APPLICATION                |
| 82264319     | Granted   | 8566745       | 10/29/2010  | 10/22/2013 | 12/916442          | US | A METHOD AND SYSTEM FOR PROJECT AND PORTFOLIO MANAGEMENT              |
| 82264328     | Published |               | 10/26/2010  |            | 12/912438          | US | SYSTEM AND METHOD FOR DEPLOYING A SOFTWARE PROGRAM                    |
| 82264367     | Published |               | 2/3/2011    |            | 13/020547          | US | PROCESSING NON-EDITABLE FIELDS IN WEB PAGES                           |
| 82264370     | Published |               | 1/28/2011   |            | 13/016433          | US | METHODS AND SYSTEMS OF CONTENT DEVELOPMENT FOR A DATA WAREHOUSE       |
| 82264376     | Published |               | 9/6/2011    |            | 13/226197          | US | Discovering Tiers Within An Application                               |
| 82264382     | Published |               | 10/29/2010  |            | 12/916445          | US | SYSTEM AND METHOD FOR SOFTWARE DEVELOPMENT REPORT GENERATION          |
| 82264424     | Published |               | 12/13/2010  |            | 12/966643          | US | COMPUTER INVENTORY DATA CONSOLIDATION                                 |
| 82264427     | Published |               | 10/29/2010  |            | 12/916435          | US | System And Method For Metric Based Allocation Of Costs                |

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| 82264448     | Granted     | 8339951       | 7/28/2010   | 12/25/2012 | 12/845446          | US | Method For Configuration Of A Load Balancing Algorithm In A Network Device                      |
| 82264502     | Application |               | 8/20/2010   |            | 12/859931          | US | Disaggregating Power Consumption                                                                |
| 82264508     | Granted     | 8914155       | 10/28/2010  | 12/16/2014 | 12/914600          | US | CONTROLLING FLUID FLOW IN A DATA CENTER                                                         |
| 82264511     | Granted     | 8260803       | 10/19/2010  | 9/4/2012   | 12/907948          | US | SYSTEM AND METHOD FOR DATA STREAM PROCESSING                                                    |
| 82264550     | Published   |               | 10/27/2010  |            | 12/913597          | US | VERSION MISMATCH DELAY AND UPDATE FOR A DISTRIBUTED SYSTEM                                      |
| 82264565     | Granted     | 8935484       | 3/31/2011   | 1/13/2015  | 13/077842          | US | WRITE-ABSORBING BUFFER FOR NON-VOLATILE MEMORY                                                  |
| 82264568     | Granted     | 8762425       | 10/18/2010  | 41814      | 12/906334          | US | Managing A Data Structure                                                                       |
| 82264571     | Granted     | 8499121       | 8/31/2011   | 41485      | 13/222919          | US | METHODS AND APPARATUS TO ACCESS DATA IN NON-VOLATILE MEMORY                                     |
| 82264613     | Granted     | 9009724       | 9/24/2010   | 42108      | 12/889727          | US | Load Balancing Data Access In Virtualized Storage Nodes                                         |
| 82264616     | Published   |               | 9/24/2010   |            | 12/889824          | US | Systems And Methods Of Managing Virtual Storage Resources                                       |
| 82264619     | Published   |               | 10/27/2010  |            | 12/925684          | US | VISUAL ANALYSIS OF A TIME SEQUENCE OF EVENTS USING A TIME DENSITY TRACK                         |
| 82264676     | Granted     | 8627448       | 11/2/2010   | 1/7/2014   | 12/938090          | US | SELECTIVE INVALIDATION OF PACKET FILTERING RESULTS                                              |
| 82264679     | Granted     | 8487289       | 10/6/2010   | 41471      | 12/899210          | US | ELECTRICALLY ACTUATED DEVICE                                                                    |
| 82264688     | Granted     | 8525146       | 12/6/2010   | 9/3/2013   | 12/961214          | US | ELECTRICAL CIRCUIT COMPONENT                                                                    |
| 82264697     | Granted     | 8212621       | 10/29/2010  | 7/3/2012   | 12/916485          | US | MEMRISTIVE PROGRAMMABLE FREQUENCY SOURCE AND METHOD                                             |
| 82264700     | Granted     | 9013177       | 10/27/2010  | 4/21/2015  | 12/913657          | US | PROGRAMMABLE ANALOG FILTER                                                                      |
| 82264703     | Granted     | 8188897       | 10/29/2010  | 41058      | 12/916376          | US | ANALOG TO DIGITAL CONVERTER                                                                     |
| 82264760     | Published   |               | 9/23/2010   |            | 12/888626          | US | METHOD AND SYSTEM FOR EVENT CORRELATION                                                         |
| 82264874     | Published   |               | 10/26/2010  |            | 12/912228          | US | System And Method For Generating An Information Integration Flow Design Using Hypercubes        |
| 82264877     | Granted     | 8538912       | 9/22/2010   | 9/17/2013  | 12/888128          | US | APPARATUS AND METHOD FOR AN AUTOMATIC INFORMATION INTEGRATION FLOW OPTIMIZER                    |
| 82265075     | Granted     | 9152522       | 10/22/2010  | 42283      | 12/910629          | US | METHODS FOR CONFIGURATION MANAGEMENT USING A FALLBACK CONFIGURATION                             |
| 82265114     | Published   |               | 11/8/2010   |            | 12/942006          | US | Backup Policies for Using Different Storage Tiers                                               |
| 82265117     | Published   |               | 11/8/2010   |            | 12/941996          | US | LOAD BALANCING BACKUP JOBS IN A VIRTUALIZED STORAGE SYSTEM HAVING A PLURALITY OF PHYSICAL NODES |
| 82265138     | Published   |               | 12/20/2010  |            | 12/973830          | US | Indexing for deduplication                                                                      |
| 82265240     | Granted     | 8561074       | 11/19/2010  | 41562      | 12/950887          | US | ENHANCED BACKUP JOB SCHEDULING                                                                  |
| 82265318     | Granted     | 8331052       | 10/27/2010  | 41254      | 12/913007          | US | WRITING DATA TO A TAPE                                                                          |
| 82265321     | Granted     | 8477446       | 1/4/2011    | 41457      | 12/984474          | US | WRITING DATA TO A TAPE                                                                          |
| 82265369     | Published   |               | 1/14/2011   |            | 13/007467          | US | DATA STAGING FOR RESULTS OF ANALYTICS                                                           |

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| 82265375     | Granted   | 899/056       | 12/15/2010  | 42094      | 12/968910          | US | DIRECTED GRAPHS PERTAINING TO READ/WRITE OPERATIONS                                                                     |
| 82265378     | Published |               | 1/27/2011   |            | 13/015475          | US | TRANSFORMING ENTITY AND RELATION DATA USING A PROXY ENGINE                                                              |
| 82265498     | Granted   | 8538029       | 3/24/2011   | 41534      | 13/071459          | US | ENCRYPTION KEY FRAGMENT DISTRIBUTION                                                                                    |
| 82265501     | Granted   | 8693881       | 11/19/2010  | 4/8/2014   | 12/950199          | US | OPTICAL HETERODYNE DEVICES                                                                                              |
| 82265507     | Granted   | 769/679       | 9/15/2006   | 40281      | 11/521785          | US | TELEPHONE SET HAVING A HANDSET WITH AN INTEGRATED POINTING DEVICE                                                       |
| 82265630     | Granted   | 5822303       | 1/30/1995   | 10/13/1998 | 08/380749          | US | REPEATERS FOR SECURE LOCAL AREA NETWORKS                                                                                |
| 82265942     | Granted   | 5781/26       | 1/31/1996   | 7/14/1998  | 08/594878          | US | Management Of Polling Traffic In Connection Oriented Protocol Sessions                                                  |
| 82265945     | Granted   | 5805827       | 3/4/1996    | 36046      | 08/610706          | US | Distributed Signal Processing For Data Channels Maintaining Channel Bandwidth                                           |
| 82265948     | Granted   | 5933420       | 4/30/1996   | 8/3/1999   | 08/640184          | US | Method and Apparatus For Assigning Spectrum Of A Wireless Local Area Network                                            |
| 82265951     | Granted   | 6208629       | 3/10/1999   | 3/27/2001  | 09/266245          | US | METHOD AND APPARATUS FOR ASSIGNING SPECTRUM OF A LOCAL AREA NETWORK                                                     |
| 82266047     | Granted   | 5802309       | 6/12/1996   | 9/1/1998   | 08/662350          | US | Method For Encoding SNMP Summary Objects                                                                                |
| 82266050     | Granted   | 5781/45       | 5/20/1996   | 7/14/1998  | 08/651804          | US | High Speed Communication Bus                                                                                            |
| 82266263     | Granted   | 5715287       | 10/18/1995  | 35829      | 08/544745          | US | METHOD AND APPARATUS FOR DUAL PURPOSE TWISTED PAIR INTERFACE CIRCUIT FOR MULTIPLE SPEED MEDIA IN A NETWORK              |
| 82266326     | Granted   | 5818838       | 10/12/1995  | 36074      | 08/542157          | US | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS                  |
| 82266377     | Granted   | 6085243       | 12/13/1996  | 7/4/2000   | 08/766274          | US | Distributed remote management (DRMON) for networks                                                                      |
| 82266386     | Granted   | 5805596       | 12/21/1995  | 9/8/1998   | 08/576802          | US | METHOD FOR IN-BAND COMMUNICATION OF MANAGEMENT INFORMATION IN A BACKPLANE ARCHITECTURE OF A STACKABLE ETHERNET REPEATER |
| 82266485     | Granted   | 6753761       | 10/28/2002  | 6/22/2004  | 10/281778          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                                   |
| 82266488     | Granted   | 7005969       | 3/12/2004   | 2/28/2006  | 10/799212          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                                   |
| 82266491     | Granted   | 6989735       | 3/18/2004   | 1/24/2006  | 10/804615          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                                   |
| 82266494     | Granted   | 5802054       | 8/15/1996   | 9/1/1998   | 08/698745          | US | ATOMIC NETWORK SWITCH WITH INTEGRATED CIRCUIT SWITCH NODES                                                              |
| 82266497     | Granted   | 6256306       | 6/3/1998    | 37075      | 09/089838          | US | ATOMIC NETWORK SWITCH WITH INTEGRATED CIRCUIT SWITCH NODES                                                              |

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| 82266503     | Granted | 6691147       | 12/7/1999   | 38027      | 09/455841          | US | Method And Apparatus Supporting Network Communications                                                                              |
| 82266506     | Granted | 6230193       | 10/31/1996  | 5/8/2001   | 08/739397          | US | Method And Apparatus Supporting Network Communications                                                                              |
| 82266509     | Granted | 7447728       | 2/2/2004    | 11/4/2008  | 10/770065          | US | Method And Apparatus Supporting Network Communications                                                                              |
| 82266512     | Granted | 7899077       | 10/27/2008  | 40603      | 12/258573          | US | Method And Apparatus For Supporting Network Communications                                                                          |
| 82266560     | Granted | 5663634       | 4/30/1996   | 35675      | 08/641400          | US | Startup Network For A Flyback Converter With Linear Regulation                                                                      |
| 82266608     | Granted | 5943341       | 10/4/1996   | 36396      | 08/726166          | US | TOKEN RING ADAPTER INTERFACE                                                                                                        |
| 82266614     | Granted | 6157647       | 11/6/1996   | 12/5/2000  | 08/744920          | US | Direct Addressing Between VLAN Subnets                                                                                              |
| 82266617     | Granted | 5883894       | 12/30/1996  | 3/16/1999  | 08/774480          | US | SHARED AUTO-NEGOTIATION LOGIC FOR MULTIPLE PORT NETWORK DEVICES                                                                     |
| 82266626     | Granted | 6148002       | 3/15/1999   | 11/14/2000 | 09/268862          | US | SHARED AUTO-NEGOTIATION LOGIC FOR MULTIPLE PORT NETWORK DEVICES                                                                     |
| 82266629     | Granted | 5999541       | 2/28/1997   | 36501      | 08/807267          | US | Transmission Of Token-Ring Packets Over Ethernet By Tunneling                                                                       |
| 82266638     | Granted | 6009423       | 10/29/1997  | 12/28/1999 | 08/960239          | US | Search Apparatus                                                                                                                    |
| 82266677     | Granted | 5898889       | 4/30/1996   | 36277      | 08/641401          | US | QUALIFIED BURST CACHE For Transfer Of Data Between Disparate Clock Domains                                                          |
| 82266683     | Granted | 5936537       | 9/23/1996   | 8/10/1999  | 08/716763          | US | High Frequency Signal Detector                                                                                                      |
| 82266686     | Granted | 5949784       | 5/1/1997    | 9/7/1999   | 08/847038          | US | Forwarding Mechanism for multi-destination Packets To Minimize Per Packet Scheduling Overhead In A Network Forwarding Engine        |
| 82266752     | Granted | 6188691       | 3/16/1998   | 2/13/2001  | 09/039725          | US | Multicast Domain Virtual Local Area Network                                                                                         |
| 82266755     | Granted | 6021495       | 5/30/1997   | 2/1/2000   | 08/866818          | US | METHOD FOR APPARATUS FOR AUTHENTICATION PROCESS OF A STAR OR HUB NETWORK CONNECTION PORTS BY DETECTING INTERRUPTION IN LINK BEAT    |
| 82266797     | Granted | 5805403       | 3/28/1996   | 9/8/1998   | 08/620801          | US | Integrated Circuit Temperature Monitoring And Protection System                                                                     |
| 82266803     | Granted | 5935245       | 4/29/1997   | 8/10/1999  | 08/827965          | US | Method And Apparatus For Providing Secure Network Communications                                                                    |
| 82266824     | Granted | 6115776       | 5/2/1997    | 9/5/2000   | 08/850538          | US | Network And Adaptor With Time-Based And Packet Number Based Interrupt Combinations                                                  |
| 82266860     | Granted | 6020562       | 11/11/1997  | 2/1/2000   | 08/967489          | US | REDUCED-CAPACITANCE COMPONENT MOUNTING PADS AND CAPACITANCE-REDUCTION METHODS FOR HIGH FREQUENCY MULTI-LAYER PRINTED CIRCUIT BOARDS |
| 82266863     | Granted | 6298067       | 5/1/1998    | 10/2/2001  | 09/071694          | US | Distributed Arbitration Scheme For Network Device                                                                                   |
| 82266866     | Granted | 6256320       | 5/29/1998   | 7/3/2001   | 09/087104          | US | DUAL CLOCKS FOR NETWORK DEVICE                                                                                                      |

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| 82266869     | Granted | 6091722       | 3/18/1997   | 7/18/2000  | 08/819873          | US | Subscriber Loop Bypass Modem                                                                                                                                    |
| 82266878     | Granted | 5875309       | 4/18/1997   | 2/23/1999  | 08/843957          | US | Arbitration System Using Linked Table                                                                                                                           |
| 82266881     | Granted | 5959972       | 5/27/1997   | 9/28/1999  | 08/863441          | US | METHOD OF PORT/LINK REDUNDANCY IN AN ATM SWITCH                                                                                                                 |
| 82266887     | Granted | 6026085       | 4/8/1997    | 2/15/2000  | 08/835536          | US | Architecture to Support A Single System Image Across Multiple Network Access Servers                                                                            |
| 82266923     | Granted | 6449348       | 5/29/1997   | 9/10/2002  | 08/865015          | US | Power Transfer Apparatus For Use By Network Devices Including Telephone Equipment                                                                               |
| 82267046     | Granted | 5949788       | 5/6/1997    | 9/7/1999   | 08/852146          | US | Method And Apparatus For Multipoint Trunking                                                                                                                    |
| 82267172     | Granted | 6084915       | 3/3/1998    | 7/4/2000   | 09/034611          | US | SIGNALING METHOD HAVING MIXED-BASE SHELL MAP INDICES                                                                                                            |
| 82267178     | Granted | 6002681       | 5/13/1997   | 12/14/1999 | 08/855052          | US | Dual Band Modem                                                                                                                                                 |
| 82267181     | Granted | 5949783       | 9/8/1997    | 9/7/1999   | 08/929196          | US | Lan Emulation Subsystems for Supporting Multiple Virtual Lans                                                                                                   |
| 82267193     | Granted | 5896415       | 5/27/1997   | 4/20/1999  | 08/863507          | US | DEVICE FOR OUT-OF-BAND TRANSMISSION ON COMPUTER PERIPHERAL                                                                                                      |
| 82267196     | Granted | 6035371       | 5/28/1997   | 3/7/2000   | 08/864475          | US | METHOD AND APPARATUS FOR ADDRESSING A STATIC RANDOM ACCESS MEMORY DEVICE BASED ON SIGNALS FOR ADDRESSING A DYNAMIC MEMORY ACCESS DEVICE                         |
| 82267358     | Granted | 6075773       | 3/17/1998   | 6/13/2000  | 09/042878          | US | MULTI-USER LAN PACKET GENERATOR                                                                                                                                 |
| 82267361     | Granted | 6125112       | 3/23/1998   | 9/26/2000  | 09/046230          | US | NON-BUFFERED, NON-BLOCKING MULTISTAGE ATM SWITCH                                                                                                                |
| 82267367     | Granted | 5999517       | 3/13/1998   | 12/7/1999  | 09/042161          | US | Summarization Of Routing Information In a Hierarchical Network                                                                                                  |
| 82267373     | Granted | 6061736       | 3/13/1998   | 5/9/2000   | 09/042162          | US | Routing Over Similar Paths                                                                                                                                      |
| 82267379     | Granted | 6118796       | 5/7/1997    | 9/12/2000  | 08/852659          | US | Apparatus For An Improved ISDN Terminal Adapter Having Automatic ISDN Switch Detection And Methods For Use Therein                                              |
| 82267382     | Granted | 5931928       | 5/7/1997    | 8/3/1999   | 08/852657          | US | System for ISDN terminal adapter DCE for automatically negotiating data compression with it's PPP peer when DTE is unable or unwilling to negotiate compression |
| 82267430     | Granted | 6201374       | 6/12/2000   | 3/13/2001  | 09/078460          | US | Voltage Regulation And Power Switching System                                                                                                                   |
| 82267433     | Granted | 6181681       | 12/29/1997  | 1/30/2001  | 08/999482          | US | LOCAL AREA NETWORK MEDIA ACCESS CONTROLLER LAYER BRIDGE                                                                                                         |
| 82267442     | Granted | 5946327       | 9/9/1997    | 8/31/1999  | 08/927372          | US | Method And Apparatus For Converting Between A Multi-Bit TDM Bus And A Single-Bit TDM Bus Using Digital Logic                                                    |
| 82267484     | Granted | 5922044       | 6/12/1997   | 7/13/1999  | 08/873440          | US | System and Method For Providing Information To Applets In A Virtual Machine                                                                                     |
| 82267490     | Granted | 6108782       | 6/24/1997   | 8/22/2000  | 08/882207          | US | DISTRIBUTED REMOTE MONITORING (DRMON) FOR NETWORKS                                                                                                              |

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| 82267559     | Granted | 5937169       | 10/29/1997  | 8/10/1999  | 08/960238          | US | OFFLOAD OF TCP SEGMENTATION TO A SMART ADAPTER                                                                                                  |
| 82267565     | Granted | 6246683       | 5/1/1998    | 6/12/2001  | 09/071692          | US | Receive Processing With Network Protocol Bypass                                                                                                 |
| 82267568     | Granted | 6956853       | 3/22/2001   | 10/18/2005 | 09/814619          | US | Receive Processing With Network Protocol Bypass                                                                                                 |
| 82267607     | Granted | 6208714       | 6/2/1998    | 3/27/2001  | 09/088580          | US | Telephone Answering Apparatus For Indicating The Presence of A Power Cycle                                                                      |
| 82267610     | Granted | 6643358       | 5/27/1998   | 11/4/2003  | 09/085278          | US | Telephone Answering Apparatus And Method For Confirming An Acoustic Command Signal                                                              |
| 82267619     | Granted | 6208716       | 6/2/1998    | 3/27/2001  | 09/088751          | US | Telephone Answering Apparatus And Method For Determining The Time Of Message Reception                                                          |
| 82267625     | Granted | 5982768       | 7/25/1997   | 11/9/1999  | 08/900320          | US | Dual Band Modem For High Bandwidth Communications                                                                                               |
| 82267628     | Granted | 6002682       | 7/25/1997   | 12/14/1999 | 08/900971          | US | Dual Band Bypass Modem                                                                                                                          |
| 82267634     | Granted | 6182172       | 8/31/1998   | 1/30/2001  | 09/144156          | US | REINITIALIZATION CIRCUIT FOR A DATA COMMUNICATIONS INTERFACE                                                                                    |
| 82267733     | Granted | 6212206       | 3/5/1998    | 4/3/2001   | 09/035727          | US | Methods And Computer Executable Instructions For Improving Communications In A Packet Switching Network                                         |
| 82267739     | Granted | 5991337       | 11/24/1997  | 11/23/1999 | 08/976698          | US | METHOD AND APPARATUS FOR IMPROVING THE SIGNAL-TO-NOISE RATION OF LOW-MAGNITUDE INPUT SIGNALS IN MODEMS                                          |
| 82267742     | Granted | 6282177       | 3/4/1998    | 8/28/2001  | 09/034653          | US | METHOD AND APPARATUS FOR DYNAMICALLY CONTROLLING THE BIAS CURRENT IN A RECEIVER IN RESPONSE TO THE TRANSMITTER POWER                            |
| 82267745     | Granted | 6173405       | 5/29/1998   | 1/9/2001   | 09/087307          | US | SECURE COMMUNICATIONS CARD MODEM AND METHOD OF USING SAME                                                                                       |
| 82267748     | Granted | 6240302       | 5/29/1998   | 5/29/2001  | 09/087557          | US | Wireless Phone With Removable Personal Information Manager                                                                                      |
| 82267757     | Granted | 5991335       | 6/25/1999   | 11/23/1999 | 08/950217          | US | METHOD AND SYSTEM FOR LINE ISOLATION                                                                                                            |
| 82267799     | Granted | 6151636       | 2/5/1998    | 11/21/2000 | 09/018872          | US | Data And Media Communication Through A Lossy Channel Using Signal Conversion                                                                    |
| 82267805     | Granted | 6105068       | 2/10/1998   | 8/15/2000  | 09/021491          | US | Method And Apparatus For Determining A Protocol Type On A Network Connection Using Error Detection Values Stored Within Internetworking Devices |
| 82267808     | Granted | 6012953       | 8/5/1997    | 1/11/2000  | 08/906023          | US | Surface Mountable Electrical Connector System                                                                                                   |
| 82267856     | Granted | 6160808       | 12/18/1997  | 12/12/2000 | 08/993541          | US | Technique For Transmitting Incoming Multi-Link Point-To-Point (PPP) Packet Traffic Over Multiple Outgoing Links In A Multi-Link Bundle          |
| 82267862     | Granted | 6311218       | 10/28/1997  | 10/30/2001 | 08/955869          | US | Method And Apparatus For Providing Security In A Star Network Connection Using Public Key Cryptography                                          |
| 82267919     | Granted | 6029186       | 1/20/1998   | 2/22/2000  | 09/009069          | US | High Speed Calculation of Cyclical Redundancy Check Sums                                                                                        |
| 82267931     | Granted | 6230181       | 11/3/1997   | 5/8/2001   | 08/963402          | US | Management Shutdown And Reset Of Embedded Systems                                                                                               |

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| 82267937     | Granted | 5999109       | 6/9/1997    | 12/7/1999  | 08/871220          | US | FRAME-BASED SPECTRAL SHAPING METHOD AND APPARATUS                                                                                                                         |
| 82268009     | Granted | 6255967       | 12/7/1999   | 7/3/2001   | 09/457433          | US | FRAME-BASED SPECTRAL SHAPING METHOD AND APPARATUS                                                                                                                         |
| 82268045     | Granted | 6009121       | 10/24/1997  | 12/28/1999 | 08/957698          | US | Method And Device For Generating Signal Constellations                                                                                                                    |
| 82268051     | Granted | 5986596       | 10/24/1997  | 11/16/1999 | 08/958702          | US | PCM Space For High Speed Data Communications<br>CONCISE STORAGE AND EXPANSION OF SIGNAL<br>CONSTELLATIONS IN PCM SPACE FOR HIGH SPEED DATA<br>COMMUNICATION               |
| 82268057     | Granted | 6130880       | 3/20/1998   | 10/10/2000 | 09/044958          | US | Method And Apparatus For Adaptive Prioritization Of<br>Multiple Information Types In Highly Congested<br>Communication Devices                                            |
| 82268114     | Granted | 6704317       | 5/27/1998   | 3/9/2004   | 09/085907          | US | MULTI-CARRIER LAN MODEM SERVER                                                                                                                                            |
| 82268120     | Granted | 6891887       | 6/20/2001   | 5/10/2005  | 09/885220          | US | MULTI-CARRIER LAN ADAPTER DEVICE USING INTERPOLATIVE<br>EQUALIZER                                                                                                         |
| 82268123     | Granted | 6044150       | 8/21/1997   | 3/28/2000  | 08/918516          | US | METHOD AND APPARATUS FOR A HOST-BASED PERSONAL<br>COMPUTER SPEAKERPHONE                                                                                                   |
| 82268129     | Granted | 6130916       | 7/10/1997   | 10/10/2000 | 08/889970          | US | Method And Apparatus For Improving A Transmission Data<br>Rate Of Baseband Data In A Wireless Network                                                                     |
| 82268189     | Granted | 6463479       | 11/30/1998  | 10/8/2002  | 09/201368          | US | APPARATUS FOR TRUNKING IN STACKED COMMUNICATION<br>DEVICES                                                                                                                |
| 82268195     | Granted | 6801953       | 8/15/2002   | 10/5/2004  | 10/219743          | US | Trunking In Stacked Communication Devices                                                                                                                                 |
| 82268198     | Granted | 6212563       | 10/1/1998   | 4/3/2001   | 09/164744          | US | Method and System for Setting and Managing Externally<br>Provided Internet Protocol Addresses Using the Dynamic Host<br>Configuration Protocol                            |
| 82268231     | Granted | 6172980       | 9/11/1997   | 1/9/2001   | 08/927913          | US | Multiple Protocol Support                                                                                                                                                 |
| 82268234     | Granted | 5991299       | 9/11/1997   | 11/23/1999 | 08/927649          | US | High Speed Header Translation Processing                                                                                                                                  |
| 82268249     | Granted | 6118768       | 9/26/1997   | 9/12/2000  | 08/938573          | US | APPARATUS AND METHODS FOR USE THEREIN FOR AN ISDN<br>LAN MODEM UTILIZING BROWSER-BASED CONFIGURATION<br>WITH ADAPTION OF NETWORK PARAMETERS                               |
| 82268252     | Granted | 6028848       | 9/26/1997   | 2/22/2000  | 08/938373          | US | Apparatus And Methods For Use Therein For An ISDN LAN<br>Modem Utilizing Internal DNS And DHCP Servers For<br>Transparent Translation Of Local Host Names To IP Addresses |
| 82268255     | Granted | 6108330       | 9/26/1997   | 8/22/2000  | 08/938370          | US | Apparatus And Methods For Use Therein For An ISDN LAN<br>Modem That Selects Among A Plurality Of DNS Servers For<br>Responding To A DNS Query                             |

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| 82268258     | Granted | 6029203       | 9/26/1997   | 2/22/2000  | 08/938369          | US | APPARATUS AND METHODS FOR USE THEREIN FOR AN ISDN LAN MODEM THAT PROVIDES ENHANCED NETWORK ACTIVITY                                                          |
| 82268261     | Granted | 6023724       | 9/26/1997   | 2/8/2000   | 08/938852          | US | Apparatus And Methods For Use Therein For An ISDN LAN Modem That Displays Fault Information To Local Hosts Through Interception Of Host DNS Request Messages |
| 82268303     | Granted | 6182149       | 1/11/1999   | 1/30/2001  | 09/228208          | US | System for Managing Dynamic Processing Resources In A Network                                                                                                |
| 82268306     | Granted | 6421734       | 11/28/2000  | 7/16/2002  | 09/728148          | US | System for Managing Dynamic Processing Resources In A Network                                                                                                |
| 82268312     | Granted | 6175871       | 10/1/1997   | 1/16/2001  | 08/942446          | US | Method And Apparatus For Real Time Communication Over Packet Networks                                                                                        |
| 82268369     | Granted | 6538997       | 6/24/1998   | 3/25/2003  | 09/103789          | US | LAYER-2 TRACE METHOD AND NODE                                                                                                                                |
| 82268372     | Granted | 6587454       | 5/28/1998   | 7/1/2003   | 09/086103          | US | NETWORK ADAPTOR FOR TELEPHONE AND DATA TRAFFIC                                                                                                               |
| 82268375     | Granted | 6658098       | 9/9/2002    | 12/2/2003  | 10/238944          | US | Power Transfer Apparatus for Use by Network devices Including Telephone Equipment                                                                            |
| 82268378     | Granted | 6006271       | 2/27/1998   | 12/21/1999 | 09/032125          | US | Method And Protocol For Complete Collision Avoidance Contention Resolution In Local Area Networks                                                            |
| 82268381     | Granted | 6116927       | 3/2/1998    | 9/12/2000  | 09/033270          | US | Electrical Connector For Use Between Media Connectors And Computer Communications Cards                                                                      |
| 82268384     | Granted | 6112245       | 4/7/1998    | 8/29/2000  | 09/056258          | US | SESSION ESTABLISHMENT FOR STATIC LINKS IN POINT-TO-POINT PROTOCOL SESSIONS                                                                                   |
| 82268420     | Granted | 6058421       | 2/4/1998    | 5/2/2000   | 09/018784          | US | Method and system for addressing network host interfaces from a cable modem using DHCP                                                                       |
| 82268432     | Granted | 6147997       | 11/7/1997   | 11/14/2000 | 08/965737          | US | Mechanism To Support An Utopia Interface Over A Backplane                                                                                                    |
| 82268444     | Granted | 6016513       | 2/19/1998   | 1/18/2000  | 09/025960          | US | METHOD OF PREVENTING PACKET LOSS DURING TRANSFERS OF DATA PACKETS BETWEEN A NETWORK INTERFACE CARD AND AN OPERATING SYSTEM OF A COMPUTER                     |
| 82268447     | Granted | 6377683       | 5/29/1998   | 4/23/2002  | 09/087001          | US | Low Complexity Frequency Domain Echo Canceller For DMT Transceivers                                                                                          |
| 82268483     | Granted | 6367018       | 6/28/2000   | 4/2/2002   | 09/019462          | US | METHOD FOR DETECTING DEDICATED LINK BETWEEN AN END STATION AND A NETWORK DEVICE                                                                              |
| 82268489     | Granted | 6070246       | 2/4/1998    | 5/30/2000  | 09/018756          | US | Method And System For Secure Cable Modem Initialization                                                                                                      |
| 82268492     | Granted | 6170061       | 2/4/1998    | 1/2/2001   | 09/018372          | US | Method And System For Secure Cable Modem Registration                                                                                                        |
| 82268495     | Granted | 6049826       | 2/4/1998    | 4/11/2000  | 09/018400          | US | Method And System For Cable Modem Initialization Using Dynamic Servers                                                                                       |
| 82268501     | Granted | 6185607       | 5/26/1998   | 2/6/2001   | 09/085395          | US | Method For Managing Network Data Transfers With Minimal Host Processor Involvement                                                                           |

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| 82268504     | Granted | 6097720       | 4/7/1998    | 8/1/2000   | 09/056284          | US | ENABLING MULTICAST DISTRIBUTION EFFICIENCIES IN A DIALUP ACCESS ENVIRONMENT                                                   |
| 82268510     | Granted | 6243846       | 4/17/1998   | 6/5/2001   | 09/062435          | US | FORWARD ERROR CORRECTION SYSTEM FOR PACKET-BASED DATA AND REAL TIME MEDIA, USING CROSS-WISE PARTIAL CALCULATION               |
| 82268546     | Granted | 6775276       | 5/27/1998   | 8/10/2004  | 09/085555          | US | METHOD AND SYSTEM FOR SEAMLESS ADDRESS ALLOCATION IN A DATA-OVER-CABLE SYSTEM                                                 |
| 82268555     | Granted | 6147874       | 12/18/1998  | 11/14/2000 | 09/215102          | US | Backplate for Securing Printed Circuit Card to a Computer Chassis                                                             |
| 82268558     | Granted | 6442141       | 8/31/1998   | 8/27/2002  | 09/143803          | US | Network Delay And Loss Simulator                                                                                              |
| 82268567     | Granted | 6195332       | 8/28/1998   | 2/27/2001  | 09/143036          | US | RATE-BASED FLOW CONTROL PROTOCOL ON AN ETHERNET-OVER-RING COMMUNICATIONS NETWORK                                              |
| 82268609     | Granted | 6363416       | 8/28/1998   | 3/26/2002  | 09/141829          | US | SYSTEM AND METHOD FOR AUTOMATIC ELECTION OF A REPRESENTATIVE NODE WITHIN A COMMUNICATIONS NETWORK WITH BUILT-IN REDUNDANCY    |
| 82268624     | Granted | 6151627       | 11/6/1998   | 11/21/2000 | 09/186656          | US | Monitoring Of a communication link utilizing history-based compression algorithms                                             |
| 82268669     | Granted | 6510162       | 5/27/1998   | 1/21/2003  | 09/090593          | US | System and Method For Managing Channel Usage In A Data Over Cable System                                                      |
| 82268675     | Granted | 6212188       | 5/1/1998    | 4/3/2001   | 09/071065          | US | Method Of Source Routing In An Asynchronous Transfer Mode Network When A Node Is In An Overload State                         |
| 82268681     | Granted | 6192043       | 5/1/1998    | 2/20/2001  | 09/071067          | US | Method Of Caching Routes In Asynchronous Transfer Mode PNNI Networks                                                          |
| 82268684     | Granted | 6178172       | 3/24/1998   | 1/23/2001  | 09/047068          | US | METHOD OF TOPOLOGY DATABASE SYNCHRONIZATION IN AN ASYNCHRONOUS TRANSFER MODE NETWORK                                          |
| 82268687     | Granted | 6279037       | 8/10/1998   | 8/21/2001  | 09/131717          | US | METHODS AND APPARATUS FOR MONITORING COLLECTING STORING PROCESSING AND USING NETWORK TRAFFIC DATA OF OVERLAPPING TIME PERIODS |
| 82268693     | Granted | 6272107       | 5/12/1998   | 8/7/2001   | 09/076686          | US | Method Of Path Restoration In An ATM Network Utilizing Point To Point Switched Virtual Circuits                               |
| 82268735     | Granted | 6222876       | 12/19/1997  | 4/24/2001  | 08/994866          | US | Detecting Valid Data Patterns For Adapting Equalization Gain And Offset for Data Transmissions                                |
| 82268738     | Granted | 6192071       | 12/19/1997  | 2/20/2001  | 08/994519          | US | DETECTING OVEREQUALIZATION FOR ADAPTING EQUALIZATION AND OFFSET FOR DATA TRANSMISSIONS                                        |
| 82268741     | Granted | 6118815       | 12/19/1997  | 9/12/2000  | 08/994862          | US | ADAPTING EQUALIZATION GAIN AND OFFSET FOR DATA TRANSMISSIONS                                                                  |
| 82268744     | Granted | 6205150       | 5/28/1998   | 3/20/2001  | 09/086394          | US | Method Of Scheduling Higher And Lower Priority Data Packets                                                                   |
| 82268747     | Granted | 6208623       | 4/13/1998   | 3/27/2001  | 09/059658          | US | METHOD OF COMBINING PNNI AND E-IISP IN AN ASYNCHRONOUS TRANSFER MODE NETWORK                                                  |

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| 82268756     | Granted | 6205146       | 5/28/1998   | 3/20/2001  | 09/086423          | US | Method Of Dynamically Routing To A Well Known Address In A Network                                                                                                            |
| 82268759     | Granted | 6269076       | 5/28/1998   | 7/31/2001  | 09/086104          | US | METHOD OF RESOLVING SPLIT VIRTUAL LANS UTILIZING NETWORK MANAGEMENT SYSTEM                                                                                                    |
| 82268795     | Granted | 6636485       | 5/14/1998   | 10/21/2003 | 09/079323          | US | METHOD AND SYSTEM FOR PROVIDING QUALITY-OF-SERVICE IN A DATA-OVER-CABLE SYSTEM                                                                                                |
| 82268798     | Granted | 6223222       | 5/14/1998   | 4/24/2001  | 09/079322          | US | METHOD AND SYSTEM FOR PROVIDING QUALITY-OF-SERVICE IN A DATA-OVER-CABLE SYSTEM USING CONFIGURATION PROTOCOL MESSAGING                                                         |
| 82268801     | Granted | 6195349       | 1/28/1998   | 2/27/2001  | 09/014547          | US | Scalable Logical Lan                                                                                                                                                          |
| 82268810     | Granted | 6055585       | 5/29/1998   | 4/25/2000  | 09/087627          | US | SYSTEM FOR OPERATING A UNIVERSAL ASYNCHRONOUS SYSTEM/TRANSMITTER (UART) AT SPEEDS HIGHER THAN 115,200 BPS WHILE MAINTAINING FULL SOFTWARE AND HARDWARE BACKWARD COMPATIBILITY |
| 82268813     | Granted | 6065049       | 2/4/1998    | 5/16/2000  | 09/018814          | US | Method And System For Resolving Addresses For Network Host Interfaces From A Cable Modem                                                                                      |
| 82268816     | Granted | 6191626       | 8/2/1999    | 2/20/2001  | 09/365010          | US | METHOD AND APPARATUS FOR COMPENSATING INPUT THRESHOLD VARIATIONS ON INPUT BUFFERS                                                                                             |
| 82268864     | Granted | 6311276       | 8/25/1998   | 10/30/2001 | 09/139625          | US | Secure System For Remote Management and Wake-Up Commands                                                                                                                      |
| 82268867     | Granted | 6606709       | 10/29/2001  | 8/12/2003  | 10/075103          | US | Secure System For Remote Management And Wake-up Commands                                                                                                                      |
| 82268876     | Granted | 6216339       | 3/9/2000    | 4/17/2001  | 09/074743          | US | Tool-Actuated Ejector Mechanism For Extracting Electronic Modular Components                                                                                                  |
| 82268882     | Granted | 6202081       | 7/21/1998   | 3/13/2001  | 09/119987          | US | METHOD AND PROTOCOL FOR SYNCHRONIZED TRANSFER-WINDOW BASED FIREWALL TRAVERSAL                                                                                                 |
| 82268918     | Granted | 6754622       | 5/24/1999   | 6/22/2004  | 09/317588          | US | Method For Network Address Table Maintenance In A Data-Over-Cable System Using Destination Reachability                                                                       |
| 82268921     | Granted | 6654387       | 5/21/1999   | 11/25/2003 | 09/316614          | US | METHOD FOR NETWORK ADDRESS TABLE MAINTENANCE IN A DATA-OVER-CABLE SYSTEM USING A NETWORK DEVICE REGISTRATION PROCEDURE                                                        |
| 82268927     | Granted | 6058116       | 4/15/1998   | 5/2/2000   | 09/060606          | US | INTERCONNECTED TRUNK CLUSTER ARRANGEMENT                                                                                                                                      |
| 82268933     | Granted | 6161134       | 10/30/1998  | 12/12/2000 | 09/181431          | US | Method, Apparatus And Communications System For Companion Information And Network Appliances                                                                                  |
| 82268936     | Granted | 6883023       | 10/10/2000  | 4/19/2005  | 09/686124          | US | METHOD APPARATUS AND COMMUNICATIONS SYSTEM FOR COMPANION INFORMATION AND NETWORK APPLIANCES                                                                                   |
| 82268939     | Granted | 6330229       | 11/9/1998   | 12/11/2001 | 09/188852          | US | SPANNING TREE WITH RAPID FORWARDING DATABASE UPDATES                                                                                                                          |
| 82268984     | Granted | 6172606       | 6/4/1999    | 1/9/2001   | 09/326769          | US | Network Security                                                                                                                                                              |

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| 82269044     | Granted | 6247082       | 11/3/1998   | 6/12/2001  | 09/186209          | US | Method And Circuit For Providing Handshaking To Transfer Information Across Multiple Clock Domains                                                                                                               |
| 82269047     | Granted | 6055594       | 8/24/1998   | 4/25/2000  | 09/139148          | US | Byte Accessible Memory Interface Using Reduced Memory Control Pin Count                                                                                                                                          |
| 82269050     | Granted | 6115760       | 8/24/1998   | 9/5/2000   | 09/138943          | US | INTELLIGENT SCALEABLE FIFO BUFFER CIRCUIT FOR INTERFACING BETWEEN DIGITAL DOMAINS                                                                                                                                |
| 82269053     | Granted | 6268999       | 4/14/1998   | 7/31/2001  | 09/060456          | US | Computer Peripheral Device With Integral Ground Clip                                                                                                                                                             |
| 82269059     | Granted | 6098139       | 5/27/1998   | 8/1/2000   | 09/085606          | US | Frequency Independent Asynchronous Clock Crossing File SYSTEM FOR ALLOCATING AN INTEGER UNIT OF MEMORY GREATER THAN A REQUESTED SIZE AND FILLING THE EXTRA SPACE DUE TO DIFFERENCE IN SIZES WITH EXTRANEOUS DATA |
| 82269062     | Granted | 6148350       | 5/29/1998   | 11/14/2000 | 09/087345          | US | Interrupt Events Chaining                                                                                                                                                                                        |
| 82269068     | Granted | 6266732       | 8/18/2000   | 7/24/2001  | 09/087484          | US | System For Transferring Length Round Down To Cache Line Multiple Capable To Determine Type of Read Request Which Selects and Reads Portion Of Prefetched Data In Memory                                          |
| 82269071     | Granted | 6055580       | 5/29/1998   | 4/25/2000  | 09/087347          | US | ADAPTIVE TREE-BASED CONTENTION RESOLUTION MEDIA ACCESS CONTROL PROTOCOL                                                                                                                                          |
| 82269107     | Granted | 6222851       | 5/29/1998   | 4/24/2001  | 09/087624          | US | Integrated Computer System And Network Performance Monitoring                                                                                                                                                    |
| 82269119     | Granted | 6269401       | 8/28/1998   | 7/31/2001  | 09/143486          | US | ORGANIZATION OF DATABASES IN NETWORK SWITCHES FOR PACKET-BASED DATA COMMUNICATIONS NETWORKS                                                                                                                      |
| 82269245     | Granted | 6922410       | 4/6/1999    | 7/26/2005  | 09/286469          | US | Carrier Phase Derived Symbol Timing                                                                                                                                                                              |
| 82269257     | Granted | 6643340       | 2/13/2002   | 11/4/2003  | 10/074780          | US | Controlled Aliasing to Simplify Service Selection                                                                                                                                                                |
| 82269260     | Granted | 6650658       | 4/7/1999    | 11/18/2003 | 09/288066          | US | Electrical Connector Having A Fusible Link For Use Between Media Connectors And Computer Communications Cards                                                                                                    |
| 82269293     | Granted | 5980322       | 9/1/1998    | 11/9/1999  | 09/144898          | US | Modular Connector With Printed Circuit Board                                                                                                                                                                     |
| 82269302     | Granted | 6120307       | 4/5/1999    | 9/19/2000  | 09/286284          | US | Methods and Computer Readable Media for Creating Dialing Strings Useful in an International Dial-up Session for Transferring Data                                                                                |
| 82269305     | Granted | 6898279       | 11/30/1998  | 5/24/2005  | 09/201673          | US | Electrical Connectors Having Dual Biased Contact Pins                                                                                                                                                            |
| 82269308     | Granted | 6102714       | 3/17/1999   | 8/15/2000  | 09/271620          | US | Electrical Connectors Having Dual Biased Contact Pins                                                                                                                                                            |
| 82269311     | Granted | 6217352       | 6/27/2000   | 4/17/2001  | 09/604205          | US | MEDIA JACK WITH SWITCH FOR LAN AND MODEM CONNECTION                                                                                                                                                              |
| 82269314     | Granted | 6139342       | 10/30/1998  | 10/31/2000 | 09/183830          | US | METHOD FOR SHARED VOLTAGE REGULATION WITH MULTIPLE DEVICES                                                                                                                                                       |
| 82269356     | Granted | 6137188       | 5/28/1999   | 10/24/2000 | 09/322837          | US | Method and Apparatus for Measurement-Based Conformance Testing of Service Level Agreements in Networks                                                                                                           |
| 82269359     | Granted | 6363053       | 2/8/1999    | 3/26/2002  | 09/246606          | US |                                                                                                                                                                                                                  |

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| 82269374     | Granted | 7460534       | 2/4/1999    | 12/2/2008  | 09/245442          | US | Method For Statistical Switching                                                                              |
| 82269431     | Granted | 6654366       | 2/25/1999   | 11/25/2003 | 09/257326          | US | Use Of Virtual Gateway In H.323 System                                                                        |
| 82269434     | Granted | 6135786       | 11/30/1998  | 10/24/2000 | 09/201679          | US | Removable Modular Connector For Connecting An Electronic Device To A Communications Card                      |
| 82269485     | Granted | 7032242       | 3/17/1999   | 4/18/2006  | 09/270967          | US | METHOD AND SYSTEM FOR DISTRIBUTED NETWORK ADDRESS TRANSLATION WITH NETWORK SECURITY FEATURES                  |
| 82269548     | Granted | 6366297       | 3/1/1999    | 4/2/2002   | 09/260150          | US | System And Method For Displaying Modem Information on a Graphical User Interface Display                      |
| 82269554     | Granted | 6771674       | 12/28/1998  | 8/3/2004   | 09/221752          | US | Method and System for Forward Error Correction Based On Parallel Streams                                      |
| 82269560     | Granted | 6618393       | 8/26/1998   | 9/9/2003   | 09/140363          | US | Method And Apparatus For Transparent Support Of Network Protocols With Header Translation                     |
| 82269569     | Granted | 6147971       | 11/18/1998  | 11/14/2000 | 09/195342          | US | OPTIMIZED ROUTING METHOD BASED ON MINIMAL HOP COUNT FOR USE IN PNNI BASED ASYNCHRONOUS TRANSFER MODE NETWORKS |
| 82269626     | Granted | 6205509       | 12/17/1999  | 3/20/2001  | 09/464263          | US | METHOD FOR IMPROVING INTERRUPT RESPONSE TIME                                                                  |
| 82269635     | Granted | 6282626       | 12/17/1999  | 8/28/2001  | 09/465891          | US | NO STALL READ ACCESS-METHOD FOR HIDING LATENCY IN PROCESSOR MEMORY ACCESSES                                   |
| 82269668     | Granted | 6678250       | 2/19/1999   | 1/13/2004  | 09/252840          | US | Method and System for Monitoring and Management of the Performance of Real-Time Networks                      |
| 82269671     | Granted | 7453815       | 12/15/2003  | 11/18/2008 | 10/735982          | US | Method and System for Monitoring and Management of the Performance of Real-Time Networks                      |
| 82269677     | Granted | 6785299       | 5/29/1999   | 8/31/2004  | 09/322886          | US | OPTIMIZED HIGH-LEVEL DATA LINK CONTROL ENCODING/DECODING                                                      |
| 82269689     | Granted | 6785261       | 5/28/1999   | 8/31/2004  | 09/322816          | US | Method And System for Forward Error Correction With Different Frame Sizes                                     |
| 82269692     | Granted | 6751202       | 4/30/1999   | 6/15/2004  | 09/303044          | US | FILTERED TRANSMIT CANCELLATION IN A FULL-DUPLEX MODEM DATA ACCESS ARRANGEMENT (DAA).                          |
| 82269695     | Granted | 7386119       | 5/13/2004   | 6/10/2008  | 10/845449          | US | Filtered Transmit Cancellation in a Full-Duplex Modem Data Access Arrangement (DAA)                           |
| 82269743     | Granted | 6661790       | 8/6/1999    | 12/9/2003  | 09/369326          | US | Packet Multicasting In A Ring Architecture                                                                    |
| 82269752     | Granted | 6411656       | 4/30/1999   | 6/25/2002  | 09/303046          | US | Echo Cancelling Softmodem                                                                                     |
| 82269800     | Granted | 6633617       | 5/21/1999   | 10/14/2003 | 09/316516          | US | DEVICE AND METHOD FOR COMPENSATING OR CREATING DOPPLER EFFECT USING DIGITAL SIGNAL PROCESSING                 |
| 82269803     | Granted | 6557108       | 5/28/1999   | 4/29/2003  | 09/322953          | US | System And Method In A Modem For Providing A Shortened Reset Pulse Upon Receipt Of An External Reset Pulse    |
| 82269818     | Granted | 6700387       | 5/30/2003   | 3/2/2004   | 10/449636          | US | Systems and Methods For Impedance Synthesis                                                                   |
| 82269821     | Granted | 6859051       | 6/2/2003    | 2/22/2005  | 10/452373          | US | Systems and Methods For Impedance Synthesis                                                                   |
| 82269857     | Granted | 6071130       | 11/30/1998  | 6/6/2000   | 09/203222          | US | Surface Mounted Contact Block                                                                                 |

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| 82269860     | Granted | 6257905       | 12/15/1999  | 7/10/2001  | 09/461137 US       |    | Surface Mounted Contact Block                                                                                                  |
| 82269878     | Granted | 6128658       | 10/22/1998  | 10/3/2000  | 09/177706 US       |    | SELF-INITIATED SYSTEM EVENT USING NETWORK RESOURCE                                                                             |
| 82269917     | Granted | 6434606       | 5/28/1999   | 8/13/2002  | 09/322561 US       |    | System For Real Time Communication Buffer Management                                                                           |
| 82269920     | Granted | 6366959       | 5/28/1999   | 4/2/2002   | 09/322836 US       |    | Method And Apparatus For Real Time Communication System Buffer Size And Error Correction Coding Selection                      |
| 82269923     | Granted | 6186462       | 5/7/1999    | 2/13/2001  | 09/307578 US       |    | Adjustable Stand Apparatus                                                                                                     |
| 82269929     | Granted | 6529589       | 5/20/1999   | 3/4/2003   | 09/314990 US       |    | Method And System For Monitoring And Controlling Automation Equipment By Modem                                                 |
| 82270004     | Granted | 6189067       | 2/26/1999   | 2/13/2001  | 09/258514 US       |    | SYSTEM AND METHOD FOR DYNAMICALLY SELECTING INTERRUPT QUANTITY THRESHOLD PARAMETERS                                            |
| 82270007     | Granted | 6351785       | 1/26/1999   | 2/26/2002  | 09/237995 US       |    | Interrupt Optimization Using Varying Quantity Threshold                                                                        |
| 82270055     | Granted | 6657991       | 12/21/1998  | 12/2/2003  | 09/218793 US       |    | METHOD AND SYSTEM FOR PROVISIONING NETWORK ADDRESSES IN A DATA-OVER-CABLE SYSTEM                                               |
| 82270058     | Granted | 6732314       | 5/26/2000   | 5/4/2004   | 09/579921 US       |    | Method and Apparatus for L2TP Forward Error Correction                                                                         |
| 82270067     | Granted | 6654463       | 5/28/1999   | 11/25/2003 | 09/322572 US       |    | Round Trip Delay Estimator And Compensator For The Echo Cancellor                                                              |
| 82270109     | Granted | 6633277       | 5/30/2000   | 10/14/2003 | 09/580709 US       |    | Compact 3-state Data Entry Device                                                                                              |
| 82270118     | Granted | 6141126       | 4/28/1999   | 10/31/2000 | 09/300855 US       |    | Wave Division Multiplexing Based Optical Switch                                                                                |
| 82270121     | Granted | 6826160       | 7/7/1999    | 11/30/2004 | 09/348983 US       |    | DYNAMIC BANDWIDTH ALLOCATION THROUGH MULTI-CHANNEL TIME SLOT ASSIGNMENT AND MIGRATION FOR BROADBAND ACCESS                     |
| 82270127     | Granted | 6785347       | 4/22/1999   | 8/31/2004  | 09/298498 US       |    | Nonlinear-Least Squares Based Method and Apparatus For FSK Signal Decoding                                                     |
| 82270130     | Granted | 6577653       | 4/28/1999   | 6/10/2003  | 09/300884 US       |    | APPARATUS FOR AND METHOD OF ESTABLISHING A ROUTE UTILIZING MULTIPLE PARALLEL SEGMENTS IN AN ASYNCHRONOUS TRANSFER MODE NETWORK |
| 82270169     | Granted | 6259409       | 7/22/1999   | 7/10/2001  | 09/359990 US       |    | Retractable Sliding Antenna Assembly For Wireless Communication                                                                |
| 82270187     | Granted | 6526446       | 4/27/1999   | 2/25/2003  | 09/300537 US       |    | Hardware Only Transmission Control Protocol Segmentation For a High Performance Network Interface Card                         |
| 82270232     | Granted | 6542504       | 5/28/1999   | 4/1/2003   | 09/322845 US       |    | Profile Based Method For Packet Header Compression In A Point To Point Link                                                    |
| 82270235     | Granted | 6690666       | 5/29/1999   | 2/10/2004  | 09/322888 US       |    | Packet Modulation For DSL                                                                                                      |
| 82270250     | Granted | 6728808       | 2/7/2000    | 4/27/2004  | 09/499504 US       |    | MECHANISM FOR OPTIMIZING TRANSACTION RETRIES WITHIN A SYSTEM UTILIZING A PCI BUS ARCHITECTURE                                  |
| 82270370     | Granted | 6771610       | 10/12/1999  | 8/3/2004   | 09/416827 US       |    | SPANNING TREE WITH PROTOCOL FOR BYPASSING PORT STATE TRANSITION TIMERS                                                         |

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| 822/70373    | Granted | 6934263       | 1/30/2004   | 8/23/2005  | 10/7/69177         | US | SPANNING TREE WITH PROTOCOL FOR BYPASSING PORT STATE TRANSITION TIMERS                                    |
| 822/70418    | Granted | 6216158       | 1/25/1999   | 4/10/2001  | 09/237609          | US | System And Method Using A Palm Sized Computer To Control Network Devices                                  |
| 822/70427    | Granted | 6765914       | 4/7/2000    | 7/20/2004  | 09/544806          | US | GENERIC SWITCH ARCHITECTURE TO SUPPORT FLEXIBLE SUBNETS ACROSS LAYER-3 DEVICES                            |
| 822/70430    | Granted | 6731642       | 5/3/1999    | 5/4/2004   | 09/303832          | US | Internet Telephony Using Network Address Translation                                                      |
| 822/70433    | Granted | 7573873       | 4/28/2004   | 8/11/2009  | 10/834418          | US | Internet Telephony Using Network Address Translation                                                      |
| 822/70436    | Granted | 6246589       | 5/28/1999   | 6/12/2001  | 09/321968          | US | RETENTION CLIP FOR RETAINING A COMPACT FLASH DRIVE ON A PC BOARD                                          |
| 822/70478    | Granted | 6785292       | 5/28/1999   | 8/31/2004  | 09/322513          | US | Method For Detecting Radio Frequency Impairments In A Data-Over-Cable System                              |
| 822/70496    | Granted | 6594272       | 11/23/1999  | 7/15/2003  | 09/447281          | US | Simple Wireless Network With Store And Forward Methods, Incorporating Anti-looping Codes                  |
| 822/70499    | Granted | 6717919       | 11/23/1999  | 4/6/2004   | 09/447280          | US | IMPRINTING METHOD FOR AUTOMATED REGISTRATION AND CONFIGURATION OF NETWORK DEVICES                         |
| 822/70541    | Granted | 6667983       | 5/27/1999   | 12/23/2003 | 09/321068          | US | SCALEABLE PRIORITY ARBITER FOR ARBITRATING BETWEEN MULTIPLE FIFO ENTRY POINTS OF A NETWORK INTERFACE CARD |
| 822/70556    | Granted | 5890126       | 3/10/1997   | 3/30/1999  | 08/815318          | US | Audio Data Decompression and Interpolation Apparatus and Method                                           |
| 822/70559    | Granted | 6111958       | 3/21/1997   | 8/29/2000  | 08/822302          | US | Audio Spatial Enhancement Apparatus and Methods                                                           |
| 822/70562    | Granted | 6078669       | 7/14/1997   | 6/20/2000  | 08/896283          | US | Audio Spatial Localization Apparatus and Methods                                                          |
| 822/70568    | Granted | 5744742       | 2/28/1997   | 4/28/1998  | 08/808676          | US | Parametric Signal Modeling Musical Synthesizer                                                            |
| 822/70607    | Granted | 6763023       | 4/6/2000    | 7/13/2004  | 09/544542          | US | Network Switch with Self-Learning Routing Facility                                                        |
| 822/70619    | Granted | 6244953       | 5/25/1999   | 6/12/2001  | 09/318165          | US | Electronic Device Fan Mounting System                                                                     |
| 822/70622    | Granted | 6618395       | 5/27/1999   | 9/9/2003   | 09/321448          | US | Physical Coding Sub-layer For Transmission Of Data Over Multi-channel Media                               |
| 822/70667    | Granted | 6771287       | 2/4/2000    | 8/3/2004   | 09/498833          | US | Graphically Distinguishing A Path Between Two Points On A Network                                         |
| 822/70679    | Granted | 6691256       | 3/17/2000   | 2/10/2004  | 09/527635          | US | Network Problem Indication                                                                                |
| 822/70685    | Granted | 6701327       | 11/22/1999  | 3/2/2004   | 09/447096          | US | Merging Network Data Sets Comprising Data Acquired By Interrogation Of A Network                          |
| 822/70736    | Granted | 6785349       | 5/28/1999   | 8/31/2004  | 09/321993          | US | Correlation Based Method of Determining Frame Boundaries of Data Frames That Are Periodically Extended    |
| 822/70745    | Granted | 6735255       | 2/29/2000   | 5/11/2004  | 09/515800          | US | Correlation Based Method of Determining Frame Boundaries of Data Frames That Are Periodically Extended    |
| 822/70751    | Granted | 6160354       | 7/22/1999   | 12/12/2000 | 09/358676          | US | Led Matrix Current Control System                                                                         |
| 822/70754    | Granted | 6135793       | 8/26/1999   | 10/24/2000 | 09/383713          | US | Coupler For Grounding Of A Modular Transceiver Housing                                                    |

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| 82270796     | Granted | 6614756       | 8/20/1999   | 9/2/2003   | 09/379141          | US | Method Of Detecting And Recovering From Signaling Congestion In An Asynchronous Transfer Mode Network                                            |
| 82270808     | Granted | 7451220       | 3/7/2006    | 11/11/2008 | 11/371213          | US | TECHNIQUES FOR PROVIDING SECURE ACCESS TO A COMMUNICATION SYSTEM                                                                                 |
| 82270811     | Granted | 6393570       | 5/28/1999   | 5/21/2002  | 09/322378          | US | Low-Power apparatus For Power Management Enabling Method And Apparatus For Automatically Loading Device Status Information Into A Network Device |
| 82270814     | Granted | 6678728       | 12/3/1999   | 1/13/2004  | 09/454783          | US | Method And Apparatus For Automatically Configuring A Configurable Integrated Circuit                                                             |
| 82270817     | Granted | 6640262       | 12/20/1999  | 10/28/2003 | 09/467724          | US | Method And Apparatus For Automatically Configuring A Configurable Integrated Circuit                                                             |
| 82270856     | Granted | 6678277       | 11/9/1999   | 1/13/2004  | 09/436893          | US | EFFICIENT MEANS TO PROVIDE BACK PRESSURE WITHOUT HEAD OF LINE BLOCKING IN A VIRTUAL OUTPUT QUEUED FORWARDING SYSTEM                              |
| 82270859     | Granted | 6625148       | 11/18/1999  | 9/23/2003  | 09/444353          | US | Self Routing Interconnect Cross-Switch                                                                                                           |
| 82270868     | Granted | 6714558       | 8/31/1999   | 3/30/2004  | 09/386742          | US | System For Implementing Network Protocols Between Devices On A Printed Circuit Board                                                             |
| 82270880     | Granted | 6507303       | 5/31/2000   | 1/14/2003  | 09/584459          | US | DIRECT DIGITAL CONVERSION OF BASEBAND SIGNALS TO SUPER-NYQUIST FREQUENCIES                                                                       |
| 82270928     | Granted | 6646656       | 3/17/2000   | 11/11/2003 | 09/528415          | US | Graphical Representation of the Connections between Network devices and Their configuration                                                      |
| 82270937     | Granted | 6643259       | 11/12/1999  | 11/4/2003  | 09/438238          | US | Method for Optimizing Data Transfer in a Data Network                                                                                            |
| 82270940     | Granted | 6643710       | 9/17/1999   | 11/4/2003  | 09/398351          | US | Architecture To Fragment Transmitted TCP Packets To A Requested Window Size                                                                      |
| 82270943     | Granted | 6654792       | 2/28/2000   | 11/25/2003 | 09/514108          | US | Method and Architecture for Logical Aggregation of Multiple Servers                                                                              |
| 82270946     | Granted | 7299301       | 9/8/2003    | 11/20/2007 | 10/657778          | US | Method and Architecture for Logical Aggregation of Multiple Servers                                                                              |
| 82271003     | Granted | 6874047       | 6/9/2000    | 3/29/2005  | 09/591044          | US | System and Method For Implementing An SMBUS/I2C Interface On A Network Interface Card                                                            |
| 82271006     | Granted | 6681244       | 6/9/2000    | 1/20/2004  | 09/591579          | US | SYSTEM AND METHOD FOR OPERATING A NETWORK ADAPTER WHEN AN ASSOCIATED NETWORK COMPUTING SYSTEM IS IN A LOW-POWER STATE                            |
| 82271042     | Granted | 7706362       | 10/29/1999  | 4/27/2010  | 09/430267          | US | METHOD AND APPARATUS FOR SELECTION OF AN ENDPOINT DEVICE IN A POINT TO POINT LINK                                                                |
| 82271051     | Granted | 5884041       | 3/13/1996   | 3/16/1999  | 08/617515          | US | METHOD AND APPARATUS FOR MONITORING AUTO-NEGOTIATION PROGRESS                                                                                    |
| 82271060     | Granted | 5844439       | 3/13/1996   | 12/1/1998  | 08/596885          | US | DC Restoration Circuit For Multi-Level Transmission Signals                                                                                      |
| 82271123     | Granted | 6212195       | 12/1/1998   | 4/3/2001   | 09/203542          | US | Telecommunication Apparatus And Method For Forwarding Packets Using Separate Collision Domains                                                   |
| 82271195     | Granted | 6262979       | 1/4/2001    | 7/17/2001  | 09/204107          | US | Telecommunication Conferencing System And Method                                                                                                 |

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| 82271237     | Granted | 6847693       | 5/16/2000   | 1/25/2005  | 09/573498          | US | Method and Device Providing Data Derived Timing Recovery For Multicarrier Communications                                                                  |
| 82271240     | Granted | 6834079       | 10/20/2000  | 12/21/2004 | 09/693498          | US | Efficient Implementation for Equalization of Multicarrier Channels                                                                                        |
| 82271258     | Granted | 6744759       | 9/27/1999   | 6/1/2004   | 09/405283          | US | SYSTEM AND METHOD FOR PROVIDING USER-CONFIGURED TELEPHONE SERVICE IN A DATA NETWORK TELEPHONY SYSTEM                                                      |
| 82271291     | Granted | 6523068       | 8/27/1999   | 2/18/2003  | 09/385118          | US | METHOD FOR ENCAPSULATING AND TRANSMITTING A MESSAGE INCLUCES PRIVATE AND FORWARDING NETWORK ADDRESSES WITH A PAYLOAD TO AN END OF A TUNNELING ASSOCIATION |
| 82271294     | Granted | 6448672       | 2/29/2000   | 9/10/2002  | 09/515799          | US | Intelligent Power Supply Control For Electronic Systems Requiring Multiple Voltages                                                                       |
| 82271297     | Granted | 6781982       | 10/26/1999  | 8/24/2004  | 09/426839          | US | Method and System for Allocating Persistent Private Network Addresses Between Private Networks                                                            |
| 82271303     | Granted | 6680908       | 10/13/1999  | 1/20/2004  | 09/416939          | US | Network Switch Including Bandwidth Allocation Controller                                                                                                  |
| 82271360     | Granted | 6665543       | 10/4/2000   | 12/16/2003 | 09/684746          | US | ANTENNA EXTRACTION ON REMOVAL OF STYLUS FOR HANDHELD DEVICE                                                                                               |
| 82271363     | Granted | 6622031       | 10/4/2000   | 9/16/2003  | 09/684161          | US | ANTENNA FLIP-UP ON REMOVAL OF STYLUS FOR HANDHELD DEVICE                                                                                                  |
| 82271366     | Granted | 6473076       | 4/5/2000    | 10/29/2002 | 09/542348          | US | Apparatus And Method For Controlling The Power Of A Handheld Computing Device Using A Stylus                                                              |
| 82271378     | Granted | 6295207       | 10/12/1999  | 9/25/2001  | 09/416542          | US | Retractable And Removable Extensions With Edge Plated Pcb's In Thin-profile Electronic Devices                                                            |
| 82271420     | Granted | 6639901       | 1/24/2000   | 10/28/2003 | 09/490750          | US | Apparatus For and Method Of Supporting 802.1Q VLAN Tagging With Independent VLAN Learning In LAN Emulation Networks                                       |
| 82271432     | Granted | 6191743       | 4/5/2000    | 2/20/2001  | 09/543037          | US | Multiple Antenna Ports for Electronic Devices                                                                                                             |
| 82271435     | Granted | 6711159       | 12/15/1999  | 3/23/2004  | 09/464527          | US | Load Balancing Among Media Gateways                                                                                                                       |
| 82271444     | Granted | 6683882       | 11/9/1999   | 1/27/2004  | 09/437592          | US | METHOD AND SYSTEM FOR DIRECTING TRANSMISSION OF IPX CONTROL PACKETS TO INFLUENCE RECEPTION OF IPX DATA PACKETS                                            |
| 82271486     | Granted | 6857072       | 9/27/1999   | 2/15/2005  | 09/405981          | US | System And Method For Enabling Encryption/Authentication On A Telephony Network                                                                           |
| 82271489     | Granted | 6577622       | 9/27/1999   | 6/10/2003  | 09/406128          | US | System And Method For Using A Portable Information Device To Establish A Conference Call On A Telephony Network                                           |
| 82271507     | Granted | 6857021       | 2/29/2000   | 2/15/2005  | 09/515796          | US | PROXIMITY-BASED REGISTRATION ON A DATA NETWORK TELEPHONY SYSTEM                                                                                           |

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| 82271540     | Granted | 7020212       | 1/16/2001   | 3/28/2006  | 09/761519          | US | Method and System For A Multiple Dimensional Adaptive Frequency Domain Noise Canceller for DMT Transceivers                           |
| 82271549     | Granted | 6772123       | 11/30/2000  | 8/3/2004   | 09/727990          | US | METHOD AND SYSTEM FOR PERFORMING SPEECH RECOGNITION FOR AN INTERNET APPLIANCE USING A REMOTELY LOCATED SPEECH RECOGNITION APPLICATION |
| 82271555     | Granted | 6836862       | 4/24/2000   | 12/28/2004 | 09/557944          | US | Method of Indicating Wireless Connection Integrity                                                                                    |
| 82271558     | Granted | 6674743       | 12/30/1999  | 1/6/2004   | 09/475855          | US | Method and Apparatus for Providing Policy-Based Services for Internal Applications                                                    |
| 82271561     | Granted | 6768743       | 10/26/1999  | 7/27/2004  | 09/426616          | US | Method and System for Address Server Redirection for Multiple Address Networks                                                        |
| 82271567     | Granted | 6708219       | 10/26/1999  | 3/16/2004  | 09/426614          | US | Method and System for Dual-Network Address Utilization                                                                                |
| 82271603     | Granted | 6810420       | 1/31/2000   | 10/26/2004 | 09/494401          | US | ALLOCATION OF IP ADDRESS BY PROXY TO DEVICE IN A LOCAL AREA NETWORK                                                                   |
| 82271624     | Granted | 6661803       | 12/30/1999  | 12/9/2003  | 09/475310          | US | Network Switch Including Bandwidth Controller                                                                                         |
| 82271672     | Granted | 6259418       | 1/20/2000   | 7/10/2001  | 09/488670          | US | Modified Monopole Antenna                                                                                                             |
| 82271678     | Granted | 6601180       | 4/14/2000   | 7/29/2003  | 09/549873          | US | METHOD AND SYSTEM FOR PROVIDING LINK DETECTION TO A PC CARD FOR POWER MANAGEMENT                                                      |
| 82271684     | Granted | 6687751       | 1/28/2000   | 2/3/2004   | 09/493563          | US | Multi-point Link Aggregation Spoofing                                                                                                 |
| 82271687     | Granted | 6804721       | 12/18/2003  | 10/12/2004 | 10/742353          | US | Multi-point Link Aggregation Spoofing                                                                                                 |
| 82271690     | Granted | 6621790       | 12/30/1999  | 9/16/2003  | 09/475896          | US | Link Aggregation Repeater Process                                                                                                     |
| 82271693     | Granted | 6853622       | 7/30/2003   | 2/8/2005   | 10/630960          | US | Link Aggregation Repeater Process                                                                                                     |
| 82271741     | Granted | 7275093       | 4/26/2000   | 9/25/2007  | 09/559883          | US | Methods and Device for Managing Message Size Transmitted Over a Network                                                               |
| 82271750     | Granted | 6636092       | 9/14/2000   | 10/21/2003 | 09/661044          | US | digital receive phase lock loop with cumulative phase error correction                                                                |
| 82271756     | Granted | 6701140       | 9/14/2000   | 3/2/2004   | 09/661691          | US | digital receive phase lock loop with cumulative phase error correction and dynamically programmable correction rate                   |
| 82271798     | Granted | 6829314       | 8/10/2000   | 12/7/2004  | 09/636047          | US | ADAPTER FOR NEAR END CROSSTALK AND ECHO CANCELLER FOR BI-DIRECTIONAL DIGITAL COMMUNICATIONS                                           |
| 82271810     | Granted | 7133446       | 10/19/2000  | 11/7/2006  | 09/693679          | US | Performance Indicator For Wireless Digital Signal Reception                                                                           |
| 82271819     | Granted | 6760309       | 3/28/2000   | 7/6/2004   | 09/535769          | US | Method of Dynamic Prioritization of Time Sensitive Packets Over A Packet Based Network                                                |
| 82271858     | Granted | 6882661       | 9/14/2000   | 4/19/2005  | 09/662157          | US | SYSTEM FOR DETECTION OF ASYNCHRONOUS PACKET RATES AND MAINTENANCE OF MAXIMUM THEORETICAL PACKET RATE                                  |
| 82271870     | Granted | 6684258       | 4/12/2000   | 1/27/2004  | 09/547759          | US | STACKABLE RING NETWORK INCLUDING BURST TRANSMISSION OF DATA PACKET                                                                    |

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| 82271882     | Granted | 6625684       | 9/25/2000   | 9/23/2003  | 09/668301          | US | APPLICATION SPECIFIC INTEGRATED CIRCUIT WITH DUAL MODE SYSTEM FOR EXTERNALLY ACCESSIBLE DATA BUSES AND VISIBILITY BUSES                       |
| 82271930     | Granted | 6694369       | 3/30/2000   | 2/17/2004  | 09/539923          | US | Tag Echo Discovery Protocol To Detect Reachability Of Channels                                                                                |
| 82271945     | Granted | 6735210       | 2/18/2000   | 5/11/2004  | 09/507256          | US | Transmit Queue Caching                                                                                                                        |
| 82271981     | Granted | 6795717       | 5/4/2000    | 9/21/2004  | 09/564197          | US | COMMUNICATIONS DEVICE HAVING RETRACTABLE DISPLAY MEANS                                                                                        |
| 82271984     | Granted | 6643265       | 5/10/2000   | 11/4/2003  | 09/569606          | US | Apparatus For And Method Of Releasing Stuck Virtual Circuits In An Asynchronous Transfer Mode Network                                         |
| 82271987     | Granted | 6694388       | 5/31/2000   | 2/17/2004  | 09/584582          | US | Dynamic Queuing System Incorporating Multiple Queues Sharing A Single Memory                                                                  |
| 82271996     | Granted | 6675308       | 5/9/2000    | 1/6/2004   | 09/568862          | US | Methods of Determining Whether A Network Interface Card Entry Within The System Registry Pertains To Physical Hardware or To A Virtual Device |
| 82271999     | Granted | 6735670       | 5/12/2000   | 5/11/2004  | 09/570204          | US | Forwarding Table Incorporating Hash Table and Content Addressable Memory                                                                      |
| 82272047     | Granted | 5844887       | 11/30/1995  | 12/1/1998  | 08/564848          | US | ATM Switching Fabric                                                                                                                          |
| 82272050     | Granted | 6724736       | 5/12/2000   | 4/20/2004  | 09/570333          | US | Remote Echo Cancellation In A Packet Based Network                                                                                            |
| 82272053     | Granted | 7072337       | 1/25/2002   | 7/4/2006   | 10/056886          | US | SYSTEM AND METHOD FOR RESOLVING NETWORK ADDRESSES FOR NETWORK DEVICES ON DISTRIBUTED NETWORK SUBNETS                                          |
| 82272059     | Granted | 6898188       | 4/19/2001   | 5/24/2005  | 09/838522          | US | Gatekeeper Simulator In A LAN Telephony System                                                                                                |
| 82272068     | Granted | 6597151       | 10/2/2000   | 7/22/2003  | 09/679056          | US | PORTABLE AUXILIARY BATTERY PACK FOR EXTENDED USE AND RECHARGING OF PERSONAL DIGITAL ASSISTANTS                                                |
| 82272107     | Granted | 7286652       | 5/31/2000   | 10/23/2007 | 09/584581          | US | Four Channel Audio Recording In A Packet Based Network                                                                                        |
| 82272113     | Granted | 6795946       | 5/5/2000    | 9/21/2004  | 09/565481          | US | Fast Frame Error Checker For Multiple Byte Digital Data Frames                                                                                |
| 82272125     | Granted | 6683875       | 5/5/2000    | 1/27/2004  | 09/564792          | US | Network Switch Including Restriction of Source Address Look-Ups Based on Receive Queue Length                                                 |
| 82272131     | Granted | 6762995       | 6/14/2000   | 7/13/2004  | 09/593506          | US | Network Switch Including Hysteresis in Signalling Fullness of Transmit Queues                                                                 |
| 82272164     | Granted | 6782428       | 10/13/2000  | 8/24/2004  | 09/689628          | US | ALLOCATION OF ASYMMETRIC PRIORITY TO TRAFFIC FLOW IN NETWORK SWITCHES                                                                         |
| 82272170     | Granted | 9112768       | 9/15/2000   | 8/18/2015  | 09/662534          | US | Discovering Non Managed Devices In A Network Such As A LAN Using HTTP                                                                         |
| 82272191     | Granted | 6738935       | 7/25/2000   | 5/18/2004  | 09/626275          | US | CODING SUBLAYER FOR MULTI-CHANNEL MEDIA WITH ERROR CORRECTION                                                                                 |
| 82272251     | Granted | 6947418       | 2/15/2001   | 9/20/2005  | 09/783940          | US | LOGICAL MULTICAST PACKET HANDLING                                                                                                             |

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| 82272293     | Granted | 6766453       | 4/28/2000   | 7/20/2004  | 09/560396          | US | Authenticated Diffie-hellman Key Agreement Protocol Where The Communicating Parties Share A Secret Key With A Third Party       |
| 82272296     | Granted | 7024690       | 4/28/2000   | 4/4/2006   | 09/561088          | US | Protected Mutual Authentication Over An Unsecured Wireless Communication Channel                                                |
| 82272299     | Granted | 6920559       | 4/28/2000   | 7/19/2005  | 09/561416          | US | Using A Key Lease In A Secondary Authentication Protocol After A Primary Authentication Protocol Has Been Performed             |
| 82272302     | Granted | 7480939       | 7/6/2001    | 1/20/2009  | 09/900617          | US | Enhancement To Authentication Protocol That Uses A Key Lease                                                                    |
| 82272359     | Granted | 6978302       | 10/17/2000  | 12/20/2005 | 09/691649          | US | NETWORK MANAGEMENT APPARATUS AND METHOD FOR IDENTIFYING CAUSAL EVENTS ON A NETWORK                                              |
| 82272365     | Granted | 6763001       | 8/17/2000   | 7/13/2004  | 09/641146          | US | Discovering non Managed Devices in a Network Such as a LAN Using Telnet                                                         |
| 82272374     | Granted | 6775243       | 9/15/2000   | 8/10/2004  | 09/662536          | US | Graphically Distinguishing a Path Between Two Points On A Network                                                               |
| 82272380     | Granted | 6928059       | 9/15/2000   | 8/9/2005   | 09/662533          | US | EFFICIENT METHOD OF DEDUCING NETWORK TOPOLOGY INCLUDING ENDSTATIONS                                                             |
| 82272416     | Granted | 6788682       | 8/2/2000    | 9/7/2004   | 09/630492          | US | MAPPING OF PACKETS BETWEEN LINKS OF TRUNK GROUPS USING MUX/DEMUX DEVICES                                                        |
| 82272419     | Granted | D451501       | 10/10/2000  | 12/4/2001  | 29/130851          | US | PCMCIA CARD WITH EXTENDABLE ANTENNA                                                                                             |
| 82272431     | Granted | 6856683       | 2/28/2001   | 2/15/2005  | 09/795991          | US | Method For Reducing Noise From A Non-Linear Device That Shares A Customer Loop With An Asymmetric Digital Subscriber Line Modem |
| 82272479     | Granted | 6912206       | 9/15/2000   | 6/28/2005  | 09/662532          | US | DISCOVERY OF PHONES ON A NETWORK, SUCH AS A LAN                                                                                 |
| 82272485     | Granted | 7194534       | 4/4/2001    | 3/20/2007  | 09/825707          | US | Display of Phones on a Map of a Network                                                                                         |
| 82272491     | Granted | 7570608       | 1/23/2006   | 8/4/2009   | 11/337777          | US | Echo Canceller Disabler for Modulated Data Signals                                                                              |
| 82272506     | Granted | D461466       | 9/21/2000   | 8/13/2002  | 29/129818          | US | Enclosure For Electronic Circuitry                                                                                              |
| 82272548     | Granted | 6954785       | 8/17/2000   | 10/11/2005 | 09/641407          | US | A SYSTEM FOR IDENTIFYING DEVICES THAT HAVE THE HIGHEST TOTAL VOLUME DATA                                                        |
| 82272554     | Granted | 6718346       | 8/17/2000   | 4/6/2004   | 09/641084          | US | GENERATING SUMMARY DATA FOR A REQUESTED TIME PERIOD HAVING A REQUESTED START TIME AND END TIME FROM A PLURALITY OF DATA RECORDS |
| 82272611     | Granted | 6741586       | 5/31/2000   | 5/25/2004  | 09/584927          | US | System and Method For Sharing Computer Screens Over A Telephony Network                                                         |
| 82272617     | Granted | 6701442       | 5/9/2000    | 3/2/2004   | 09/568195          | US | A POWER MANAGEMENT CIRCUIT FOR SELECTIVELY APPLYING POWER TO NETWORK                                                            |
| 82272668     | Granted | 6999453       | 7/9/2001    | 2/14/2006  | 09/901403          | US | Distributed Switch Fabric Arbitration                                                                                           |
| 82272680     | Granted | 6650546       | 2/27/2001   | 11/18/2003 | 09/794515          | US | CHIP COMPONENT ASSEMBLY                                                                                                         |

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| 82272692     | Granted | 6870830       | 11/30/2000  | 3/22/2005  | 09/726993          | US | System and Method For Performing Messaging Services Using A Data Communications Channel in a Data Network                                               |
| 82272728     | Granted | 6966003       | 1/12/2001   | 11/15/2005 | 09/760434          | US | Telephone System                                                                                                                                        |
| 82272737     | Granted | 6807437       | 1/31/2001   | 10/19/2004 | 09/775022          | US | System and method for switching security associations                                                                                                   |
| 82272740     | Granted | 6795688       | 1/19/2001   | 9/21/2004  | 09/765905          | US | WIRELESS COMMUNICATION APPARATUS FOR PORTABLE ELECTRONIC DEVICES                                                                                        |
| 82272746     | Granted | 6865223       | 2/5/2001    | 3/8/2005   | 09/777083          | US | METHOD AND SYSTEM FOR PERSONAL AREA NETWORK (PAN) DEGREES OF MOBILITY - BASED CONFIGURATION Equalizer Adapter for a Pulse Amplitude Modulation Receiver |
| 82272749     | Granted | 6996062       | 2/28/2001   | 2/7/2006   | 09/795549          | US | POLICY-BASED WEIGHTED RANDOM EARLY DETECTION METHOD FOR AVOIDING CONGESTION IN INTERNET TRAFFIC                                                         |
| 82272755     | Granted | 6703954       | 12/20/2002  | 3/9/2004   | 10/327448          | US | DIRECT DIGITAL CONVERSION OF BASEBAND SIGNALS TO SUPER-NYQUIST FREQUENCIES                                                                              |
| 82272812     | Granted | 6917592       | 1/22/2001   | 7/12/2005  | 09/767048          | US | LNS High Availability and Load Balancing with LNS-to-LNS State Offloading                                                                               |
| 82272863     | Granted | 6829309       | 2/5/2001    | 12/7/2004  | 09/777080          | US | PHASE DETECTOR FOR BAUD RATE-SAMPLED MULTI-STATE SIGNAL RECEIVER                                                                                        |
| 82272926     | Granted | 6938079       | 9/19/2000   | 8/30/2005  | 09/665050          | US | System and Method for automatically configuring a client device                                                                                         |
| 82272944     | Granted | 6732323       | 10/12/2000  | 5/4/2004   | 09/689367          | US | Method Of Selecting Initialization Parameters For Multi-channel Data Communication With Forward Error Correction                                        |
| 82272998     | Granted | 7366168       | 4/3/2001    | 4/29/2008  | 09/824241          | US | TCP Control Packet Differential Service                                                                                                                 |
| 82273040     | Granted | 6954786       | 12/8/2000   | 10/11/2005 | 09/732977          | US | METHOD AND ARCHITECTURE FOR A HIGH PERFORMANCE CACHE FOR DISTRIBUTED, WEB-BASED MANAGEMENT SOLUTIONS                                                    |
| 82273043     | Granted | 7088678       | 8/27/2001   | 8/8/2006   | 09/941280          | US | System and Method for Traffic Shaping Based on Generalized Congestion and Flow Control                                                                  |
| 82273103     | Granted | D464623       | 1/8/2001    | 10/22/2002 | 29/135211          | US | Adapter (Design)                                                                                                                                        |
| 82273106     | Granted | 6952428       | 1/26/2001   | 10/4/2005  | 09/772095          | US | SYSTEM AND METHOD FOR A SPECIALIZED DYNAMIC HOST CONFIGURATION PROTOCOL PROXY IN A DATA-OVER-CABLE NETWORK                                              |
| 82273109     | Granted | 7009952       | 5/24/2001   | 3/7/2006   | 09/865120          | US | Method And Apparatus For Seamless Mobility With Layer Two Assistance                                                                                    |
| 82273115     | Granted | 6457992       | 4/27/2001   | 10/1/2002  | 09/845078          | US | Visual Feedback System For Electronic Device                                                                                                            |
| 82273124     | Granted | 7068597       | 11/27/2000  | 6/27/2006  | 09/722980          | US | SYSTEM AND METHOD FOR AUTOMATIC LOAD BALANCING IN A DATA-OVER-CABLE NETWORK                                                                             |
| 82273172     | Granted | 6819680       | 3/26/2001   | 11/16/2004 | 09/816313          | US | Link Aggregation Control For Network Devices                                                                                                            |

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| 82273190     | Granted | 6973513       | 4/9/2001    | 12/6/2005  | 09/829644          | US | METHOD FOR EFFICIENT USE OF A TRANSMIT ENGINE                                                                        |
| 82273226     | Granted | 6665748       | 12/28/2000  | 12/16/2003 | 09/752495          | US | SPECIALIZED PCMCIA HOST ADAPTER FOR USE WITH LOW COST MICROPROCESSORS                                                |
| 82273238     | Granted | 7068654       | 4/18/2001   | 6/27/2006  | 09/837106          | US | System and Method for Providing masquerading Using a Multiprotocol Label Switching                                   |
| 82273244     | Granted | 6646635       | 1/19/2001   | 11/11/2003 | 09/765895          | US | Stylus apparatus and method for transmitting light                                                                   |
| 82273253     | Granted | 6963921       | 2/16/2001   | 11/8/2005  | 09/785015          | US | Method And Apparatus For Hardware Assisted TCP Packet Reassembly                                                     |
| 82273295     | Granted | 6873701       | 3/29/2001   | 3/29/2005  | 09/821409          | US | SYSTEM AND METHOD FOR DTMF DETECTION USING LIKELIHOOD RATIOS                                                         |
| 82273307     | Granted | 6868088       | 4/26/2001   | 3/15/2005  | 09/843660          | US | AUTOMATIC DETECTOR OF MEDIA INTERFACE PROTOCOL TYPE                                                                  |
| 82273313     | Granted | 7340515       | 7/10/2001   | 3/4/2008   | 09/901010          | US | Optimisation of Network Configuration                                                                                |
| 82273352     | Granted | 7137047       | 4/5/2004    | 11/14/2006 | 10/818250          | US | METHOD AND APPARATUS FOR SELECTION OF ARQ PARAMETERS AND ESTIMATION OF IMPROVED COMMUNICATIONS                       |
| 82273364     | Granted | 6751700       | 4/2/2001    | 6/15/2004  | 09/822244          | US | Data Processor And Storage System Including A Set Associative Cache With Memory Aliasing                             |
| 82273376     | Granted | 7010588       | 7/2/2001    | 3/7/2006   | 09/897212          | US | A SYSTEM USING A SERIES OF EVENT PROCESSORS FOR PROCESSING NETWORK EVENTS TO REDUCE NUMBER OF EVENTS TO BE DISPLAYED |
| 82273421     | Granted | 6718411       | 6/29/2001   | 4/6/2004   | 09/893659          | US | ASIC SYSTEM ARCHITECTURE INCLUDING DATA AGGREGATION TECHNIQUE                                                        |
| 82273439     | Granted | 6877145       | 8/2/2001    | 4/5/2005   | 09/919806          | US | Automatic Generation of Interconnect Logic Components                                                                |
| 82273484     | Granted | 7577857       | 8/29/2001   | 8/18/2009  | 09/942789          | US | HIGH SPEED NETWORK INTERFACE WITH AUTOMATIC POWER MANAGEMENT WITH AUTO-NEGOTIATION                                   |
| 82273487     | Granted | 8046614       | 7/20/2009   | 10/25/2011 | 12/505590          | US | AN INTEGRATED CIRCUIT HAVING A NETWORKING INTERFACE MODULE SUPPORTING A PLURALITY OF PROTOCOLS                       |
| 82273496     | Granted | 7392518       | 2/21/2002   | 6/24/2008  | 10/080931          | US | ROBUST REMOTE FLASH ROM UPGRADE SYSTEM AND METHOD                                                                    |
| 82273541     | Granted | 7023809       | 8/3/2001    | 4/4/2006   | 09/922995          | US | Intelligent Concentrator Usage                                                                                       |
| 82273550     | Granted | 6970921       | 7/27/2001   | 11/29/2005 | 09/916377          | US | Network Interface Supporting Virtual Paths for Quality of Service                                                    |
| 82273562     | Granted | 6745333       | 1/31/2002   | 6/1/2004   | 10/062871          | US | METHOD FOR DETECTING UNAUTHORIZED NETWORK ACCESS BY HAVING A NIC MONITOR FOR PACKETS PURPORTING TO BE FROM ITSELF    |
| 82273601     | Granted | 6642801       | 8/21/2001   | 11/4/2003  | 09/933654          | US | Oscillator Using Virtual Stages For Multi-Gigabit Clock Recovery                                                     |

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| 82273604     | Granted | 7225236       | 8/7/2001    | 5/29/2007  | 09/923895          | US | LOAD BALANCING BETWEEN LNSS USING VIRTUAL LNS WITH MINIMAL LAC CONFIGURATION                                         |
| 82273613     | Granted | 6724637       | 7/16/2003   | 4/20/2004  | 10/621219          | US | APPARATUS AND METHOD FOR HARNESSING OPTICAL FIBER TO A CIRCUIT BOARD                                                 |
| 82273625     | Granted | 8014339       | 2/25/2003   | 9/6/2011   | 10/374826          | US | Methods For Providing Universal Network Access Within Wires Communication System                                     |
| 82273664     | Granted | 8346938       | 9/25/2002   | 1/1/2013   | 10/254395          | US | EFFICIENT ESTABLISHMENT OF WIRELESS CONNECTIONS                                                                      |
| 82273676     | Granted | 7085364       | 8/20/2001   | 8/1/2006   | 09/933558          | US | Advanced Conference Drop                                                                                             |
| 82273682     | Granted | 7073066       | 8/28/2001   | 7/4/2006   | 09/942176          | US | Offloading Cryptographic Processing From An Access Point To An Access Point Server Using OTWAY-REES Key Distribution |
| 82273685     | Granted | 7299287       | 2/27/2002   | 11/20/2007 | 10/086009          | US | SECURE NETWORK OUTLET FOR SUPPORTING IP DEVICE ADDRESS ASSIGNING FUNCTIONALITY                                       |
| 82273691     | Granted | 7194251       | 2/22/2002   | 3/20/2007  | 10/082422          | US | INTELLIGENT GATE DISTRIBUTED USE AND DEVICE NETWORK ACCESS MANAGEMENT ON PERSONAL AREA NETWORK                       |
| 82273733     | Granted | D465772       | 9/28/2001   | 11/19/2002 | 29/148797          | US | Printed Circuit Board                                                                                                |
| 82273745     | Granted | D466095       | 9/28/2001   | 11/26/2002 | 29/148798          | US | Electronic Extender                                                                                                  |
| 82273751     | Granted | 7340536       | 1/22/2002   | 3/4/2008   | 10/054422          | US | Method and Apparatus For Determining Unmanaged Network Devices in the Topology of a Network                          |
| 82273793     | Granted | 7424532       | 2/15/2002   | 9/9/2008   | 10/077824          | US | METHOD AND SYSTEM FOR AUTOMATIC NETWORK RESOURCE SELECTION AND CONFIGURATION IN A NETWORK ENVIRONMENT                |
| 82273796     | Granted | 7746834       | 3/17/2003   | 6/29/2010  | 10/390052          | US | Method of Dynamically Locating and Connecting to a Wireless Device                                                   |
| 82273814     | Granted | 7042889       | 3/4/2002    | 5/9/2006   | 10/086890          | US | Network Switch With Parallel Working Of Look-up Engine And Network Processor                                         |
| 82273862     | Granted | 6612856       | 12/17/2001  | 9/2/2003   | 10/023009          | US | Apparatus and Methods for Preventing Cable-Discharge Damage to Electronic Equipment                                  |
| 82273865     | Granted | 7274703       | 7/16/2002   | 9/25/2007  | 10/195503          | US | STACKABLE NETWORK UNITS WITH RESILIENCY FACILITY                                                                     |
| 82273871     | Granted | 7249183       | 6/4/2002    | 7/24/2007  | 10/163139          | US | METHOD TO ENABLE CONTINUOUS MOBILITY ACROSS WIRED AND WIRELESS NETWORK INTERFACES                                    |
| 82273874     | Granted | 7564861       | 8/22/2002   | 7/21/2009  | 10/225986          | US | SYSTEMS AND METHODS FOR COMPRESSING DATA                                                                             |
| 82273919     | Granted | 7289496       | 2/8/2002    | 10/30/2007 | 10/067738          | US | Cascade System For Network Units                                                                                     |
| 82273925     | Granted | 8213420       | 9/19/2007   | 7/3/2012   | 11/857512          | US | Cascade System For Network Units                                                                                     |
| 82273931     | Granted | 7123615       | 3/11/2002   | 10/17/2006 | 10/093506          | US | STACKED NETWORK ROUTERS                                                                                              |
| 82273976     | Granted | 6880020       | 2/22/2002   | 4/12/2005  | 10/082496          | US | METHOD AND SYSTEM FOR INSTALLING DIFFERENT COMMUNICATIONS JACKS INTO AN INTELLIGENT DATA CONCENTRATOR                |
| 82273982     | Granted | 8116285       | 9/19/2002   | 2/14/2012  | 10/246827          | US | INTELLIGENT WIRELESS ACCESS POINT SELECTION                                                                          |

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| 82273988     | Granted     | 8307063       | 6/25/2002   | 11/6/2012  | 10/179496          | US | Method And Apparatus For Managing Data Traffic Associated With A User On A Network                           |
| 82274000     | Granted     | 7062566       | 10/24/2002  | 6/13/2006  | 10/279364          | US | System and Method for Using Virtual Local Area Networks with a Virtual Private Network                       |
| 82274045     | Granted     | 8107496       | 4/23/2010   | 1/31/2012  | 12/766292          | US | System And Method For Roaming Between Wireless Networks                                                      |
| 82274048     | Granted     | 6833712       | 9/27/2002   | 12/21/2004 | 10/256772          | US | Differentiating Between Board-Insertion Power-On and Chassis Power-On                                        |
| 82274051     | Granted     | 7280554       | 7/23/2002   | 10/9/2007  | 10/201876          | US | COMPUTER IMPLEMENTED METHOD FOR ASSIGNING A BACK-OFF INTERVAL TO AN INTERMEDIARY NETWORK ACCESS DEVICE       |
| 82274063     | Granted     | 6882217       | 9/27/2002   | 4/19/2005  | 10/259108          | US | Cubic Spline Predistortion, Algorithm and Training, For a Wireless LAN System                                |
| 82274066     | Granted     | 7283543       | 11/27/2002  | 10/16/2007 | 10/306328          | US | System and Method for Operating Echo Cancellers with Networks Having Insufficient Levels of Echo Return Loss |
| 82274108     | Granted     | 7603486       | 11/26/2002  | 10/13/2009 | 10/304218          | US | NETWORK MANAGEMENT SYSTEM PROVIDING LOGIC SIGNALS OVER COMMUNICATION LINES FOR DETECTING PERIPHERAL DEVICES  |
| 82274114     | Granted     | 7463620       | 9/10/2002   | 12/9/2008  | 10/243642          | US | ARCHITECTURE AND METHOD FOR CONTROLLING FEATURES AND SERVICES IN PACKET-BASED NETWORKS                       |
| 82274120     | Granted     | 7274750       | 9/27/2002   | 9/25/2007  | 10/259082          | US | Gain and Phase Imbalance Compensation for OFDM Systems                                                       |
| 82274123     | Application |               | 10/30/2003  |            | 10/696922          | US | Method And System For Facilitating Real-time Monitoring Of Voice Messages Being Left At A Messaging Platform |
| 82274162     | Granted     | 7724740       | 8/27/2002   | 5/25/2010  | 10/228488          | US | Computer System And Network Interface Supporting Class Of Service Queues                                     |
| 82274165     | Granted     | 8358655       | 4/9/2010    | 1/22/2013  | 12/757294          | US | Computer System And Network Interface Supporting Class Of Service Queues                                     |
| 82274168     | Granted     | 7307998       | 8/27/2002   | 12/11/2007 | 10/229361          | US | Computer System And Network Interface Supporting Dynamically Optimized Receive Buffer Queues                 |
| 82274186     | Granted     | 7433918       | 6/19/2003   | 10/7/2008  | 10/465282          | US | Computer Network And Method Of Operating Same To Preload Content Of Selected Web Pages                       |
| 82274189     | Granted     | 7613771       | 8/28/2008   | 11/3/2009  | 12/200084          | US | Computer Network And Method Of Operating Same To Preload Content Of Selected Web Pages                       |
| 82274192     | Granted     | 8510408       | 9/17/2009   | 8/13/2013  | 12/561457          | US | Computer Network And Method Of Operating Same To Preload Content Of Selected Web Pages                       |
| 82274231     | Granted     | 7490155       | 3/13/2003   | 2/10/2009  | 10/389518          | US | Management and Control for Interactive Media Sessions                                                        |
| 82274255     | Granted     | 7522589       | 1/7/2003    | 4/21/2009  | 10/337299          | US | Network Units For Use In And Organisation Of Cascade Systems                                                 |

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| 822/4288     | Granted   | 7359370       | 2/27/2003   | 4/15/2008  | 10/375709          | US | Method of Communicating Between Network Devices Through Gateways Using Call Discrimination Options               |
| 822/4294     | Granted   | 7480723       | 4/8/2003    | 1/20/2009  | 10/409294          | US | Method and System For Providing Directory Based Services                                                         |
| 822/4312     | Granted   | 7155622       | 11/14/2003  | 12/26/2006 | 10/477603          | US | System and method for the management of power supplied over data lines                                           |
| 822/4351     | Granted   | 8321676       | 12/21/2009  | 11/27/2012 | 12/642942          | US | METHOD FOR ESTABLISHING SECURE AD HOC WIRELESS NETWORK                                                           |
| 822/4354     | Granted   | 7317722       | 8/20/2003   | 1/8/2008   | 10/644155          | US | System and method for distributed multicast routing                                                              |
| 822/4360     | Granted   | 7720066       | 11/16/2007  | 5/18/2010  | 11/941316          | US | System and method for distributed multicast routing                                                              |
| 822/4378     | Granted   | 7483394       | 12/20/2004  | 1/27/2009  | 11/018712          | US | SYSTEM AND METHOD FOR AUTOMATICALLY MANAGING A NETWORK PORT BASED ON A CALENDAR FUNCTION                         |
| 822/4420     | Granted   | 7916757       | 12/8/2008   | 3/29/2011  | 12/329776          | US | Stackable Routers Employing A Routing Protocol                                                                   |
| 822/4432     | Granted   | 8327026       | 7/1/2004    | 12/4/2012  | 10/883148          | US | Method and system for selecting a data compression technique for data transfer through a data network            |
| 822/4441     | Granted   | 7440440       | 12/12/2003  | 10/21/2008 | 10/734560          | US | METHOD AND SYSTEM FOR DEVICE-BASED CALL PARK AND PICK-UP                                                         |
| 822/4477     | Granted   | 8023495       | 11/20/2007  | 9/20/2011  | 11/943297          | US | Method and System for WLAN Synchronization                                                                       |
| 822/4480     | Granted   | 8792475       | 3/11/2005   | 7/29/2014  | 11/078017          | US | Method And System For Providing Pass Through Web Configuration On An Internet Protocol (IP) Telephone            |
| 822/4483     | Granted   | 9036618       | 3/11/2005   | 5/19/2015  | 11/078955          | US | Method And System For Providing Voice Assisted Configuration On An Internet Protocol (IP) Telephone              |
| 822/4486     | Granted   | 7386103       | 12/14/2004  | 6/10/2008  | 11/014099          | US | Method and system for providing prompt navigation in interactive voice response (IVR) system                     |
| 822/4495     | Published |               | 12/23/2009  |            | 12/645548          | US | Method And Apparatus For Controlling Traffic Between Different Entities On A Network                             |
| 822/4504     | Granted   | 7596614       | 7/29/2005   | 9/29/2009  | 11/192774          | US | NETWORK INCLUDING SNOOPING                                                                                       |
| 822/4555     | Granted   | 7480300       | 2/22/2005   | 1/20/2009  | 11/064258          | US | Content Addressable Memory organized to share entries between different entities such as ports of a network Unit |
| 822/4561     | Granted   | 7843910       | 2/28/2005   | 11/30/2010 | 11/069798          | US | Deciphering Encapsulated And Enciphered UDP Datagrams                                                            |
| 822/4567     | Granted   | 7672941       | 2/22/2005   | 3/2/2010   | 11/064257          | US | Pattern matching using deterministic finite automata and organization of such automata                           |
| 822/4603     | Granted   | 7818564       | 5/3/2005    | 10/19/2010 | 11/121231          | US | DECIPHERING OF FRAGMENTED ENCRYPTED DATA PACKETS                                                                 |
| 822/4609     | Granted   | 8060546       | 8/31/2007   | 11/15/2011 | 11/848302          | US | Header DFA And Header DFA Graph + Header DFA Prior To Pattern Matching [combining Two Ideas In JH 2/10/05 Email] |
| 822/4615     | Granted   | 8331404       | 10/25/2007  | 12/11/2012 | 11/923869          | US | Signature Checking Using Deterministic Finite State Machines                                                     |

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| 82274621     | Granted     | 7827398       | 10/27/2005  | 11/2/2010  | 11/260728          | US | Method For Offloading Encryption And Decryption Of A Message Received At A Message Server To Remote End Devices        |
| 82274624     | Granted     | 7978686       | 1/3/2006    | 7/12/2011  | 11/324638          | US | System And Method For Feature-based Services Controlling SIP                                                           |
| 82274669     | Granted     | D451091       | 9/20/2000   | 37222      | 29/129721          | US | Bezel for a Telephone Base                                                                                             |
| 82274672     | Granted     | D450687       | 9/20/2000   | 11/20/2001 | 29/129719          | US | Scroll Wheel for a Telephone Base                                                                                      |
| 82274681     | Granted     | 8266329       | 5/31/2007   | 9/11/2012  | 11/756022          | US | Apparatus And Method For Accessing Command Line Interface Information From A Device                                    |
| 82274684     | Application |               | 2/27/2006   |            | 11/363422          | US | METHOD AND APPARATUS FOR EXCHANGING SRTP KEYS OVER AN UNSECURED SIGNALING CHANNEL                                      |
| 82274687     | Granted     | 7359962       | 4/30/2002   | 4/15/2008  | 10/136889          | US | Network Security System Integration                                                                                    |
| 82274690     | Granted     | 7590855       | 4/30/2002   | 9/15/2009  | 10/136896          | US | STEGANOGRAPHICALLY AUTHENTICATED PACKET TRAFFIC                                                                        |
| 82274726     | Granted     | 7451489       | 8/31/2004   | 11/11/2008 | 10/930392          | US | Active Network Defense System and Method                                                                               |
| 82274729     | Granted     | 7454792       | 8/31/2004   | 11/18/2008 | 10/930922          | US | Active Network Defense System and Method                                                                               |
| 82274786     | Granted     | 7773739       | 2/7/2006    | 8/10/2010  | 11/348818          | US | Self-configurable Telephony Architecture                                                                               |
| 82274792     | Published   |               | 2/6/2006    |            | 11/347893          | US | DYNAMIC NETWORK TUNER FOR THE AUTOMATED CORRELATION OF NETWORKING DEVICE FUNCTIONALITY AND NETWORK-RELATED PERFORMANCE |
| 82274795     | Granted     | 8199754       | 5/30/2006   | 6/12/2012  | 11/443490          | US | Intrusion Prevention System Edge Controller                                                                            |
| 82274798     | Granted     | 7532474       | 2/21/2006   | 5/12/2009  | 11/358384          | US | Apparatus for Dissipating Heat from Electronic Components in an Enclosed Housing                                       |
| 82274804     | Published   |               | 12/8/2006   |            | 11/636340          | US | Bi-planar Network Architecture                                                                                         |
| 82274861     | Granted     | 8259715       | 7/25/2007   | 9/4/2012   | 11/782840          | US | SYSTEM AND METHOD FOR TRAFFIC LOAD BALANCING TO MANAGE MULTIPLE PROCESSORS                                             |
| 82274870     | Granted     | 8132233       | 7/27/2007   | 3/6/2012   | 11/829462          | US | Dynamic Network Access Control Method And Apparatus                                                                    |
| 82274873     | Published   |               | 10/10/2008  |            | 12/249244          | US | Method And System For Controlling A Delay Of Packet Processing Using Loop Paths                                        |
| 82274879     | Granted     | 8347384       | 7/29/2008   | 1/1/2013   | 12/181400          | US | METHODS AND SYSTEMS FOR USING INCREMENTAL OPERATION FOR PROCESSING REGULAR EXPRESSIONS IN INTRUSION-PREVENTION SYSTEMS |
| 82274915     | Granted     | 8448249       | 7/29/2008   | 5/21/2013  | 12/181511          | US | Methods and Systems for Using Lambda Transitions for Processing Regular Expressions In Intrusion-Prevention Systems    |
| 82274921     | Granted     | 8024802       | 7/30/2008   | 9/20/2011  | 12/182262          | US | METHODS AND SYSTEMS FOR USING STATE RANGES FOR PROCESSING REGULAR EXPRESSIONS IN INTRUSION-PREVENTION SYSTEMS          |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82274927     | Application |               | 7/30/2008   |            | 12/182391          | US | METHODS AND SYSTEMS FOR USING KEYWORD PREPROCESSING, BOYER-MOORE ANALYSIS, AND HYBRID THEREOF, FOR PROCESSING REGULAR EXPRESSIONS IN INTRUSION-PREVENTION SYSTEMS |
| 82274975     | Granted     | 8138838       | 8/1/2008    | 3/20/2012  | 12/184693          | US | Electron Beam Switch                                                                                                                                              |
| 82274978     | Granted     | 8205102       | 1/5/2009    | 6/19/2012  | 12/348697          | US | Intelligent Power Management of an Intermediate Network Device Switching Circuitry and PoE Delivery                                                               |
| 82274984     | Granted     | 7982336       | 2/16/2009   | 7/19/2011  | 12/371763          | US | Power Sharing With Stackable Switches                                                                                                                             |
| 82274993     | Granted     | 8270420       | 12/15/2009  | 41170      | 12/638954          | US | Iscsi To Fcoe Gateway                                                                                                                                             |
| 82274996     | Published   |               | 2/22/2010   |            | 12/710223          | US | Intelligent Network Security Resource Deployment System                                                                                                           |
| 82275002     | Granted     | 8782787       | 10/26/2010  | 7/15/2014  | 12/911912          | US | DISTRIBUTED PACKET FLOW INSPECTION AND PROCESSING                                                                                                                 |
| 82275227     | Granted     | 5705949       | 9/13/1996   | 1/6/1998   | 08/712927          | US | Compensation Method For I/Q Channel Imbalance Errors                                                                                                              |
| 82275287     | Granted     | 6157649       | 10/31/1997  | 12/5/2000  | 08/961981          | US | Method And System For Coordination And Control Of Data Streams That Terminate At Different Termination Units Using Virtual Tunneling                              |
| 82275290     | Granted     | 5819215       | 10/13/1995  | 10/6/1998  | 08/543205          | US | METHOD AND APPARATUS FOR WAVELET BASED DATA COMPRESSION HAVING ADAPTIVE BIT RATE CONTROL FOR COMPRESSION OF DIGITAL AUDIO OR OTHER SENSORY DATA                   |
|              |             |               |             |            |                    |    |                                                                                                                                                                   |
| 82275353     | Granted     | 5831678       | 8/9/1996    | 11/3/1998  | 08/689401          | US | VIDEO ENCODER/DECODER SYSTEM                                                                                                                                      |
| 82275371     | Granted     | 6212272       | 9/9/1998    | 4/3/2001   | 09/149982          | US | SUBSCRIBER LINE INTERFACE CIRCUIT (SLIC) SIMULATOR                                                                                                                |
| 82275377     | Granted     | 5797771       | 8/16/1996   | 8/25/1998  | 08/689714          | US | Cable Connector                                                                                                                                                   |
| 82275419     | Granted     | 5931704       | 2/27/1997   | 8/3/1999   | 08/808508          | US | MEDIA CONNECTOR INTERFACE WITH TAPERED CONTACT WIRES FOR USE WITH A THIN-ARCHITECTURE COMMUNICATIONS CARD                                                         |
| 82275428     | Granted     | 5987568       | 7/15/1999   | 11/16/1999 | 08/853068          | US | APPARATUS AND METHOD FOR OPERABLY CONNECTING A PROCESSOR CACHE AND A CACHE CONTROLLER TO A DIGITAL SIGNAL PROCESSOR                                               |
| 82275434     | Granted     | 6125448       | 5/2/1997    | 9/26/2000  | 08/850089          | US | Power Subsystem For A Communication Network Containing A Power Bus                                                                                                |
| 82275437     | Granted     | 6243818       | 9/6/2000    | 6/5/2001   | 09/655955          | US | Power Subsystem For A Communication Network Containing A Power Bus                                                                                                |
| 82275440     | Granted     | 6405247       | 4/16/2001   | 37418      | 09/835712          | US | METHOD AND APPARATUS FOR OPERATING THE INTERNET PROTOCOL OVER A HIGH-SPEED SERIAL BUS                                                                             |
| 82275542     | Granted     | 8374904       | 11/15/2010  | 2/12/2013  | 12/946367          | US | Market Forecasting                                                                                                                                                |
| 82275545     | Published   |               | 12/15/2010  |            | 12/968929          | US | TARGET LEVEL SETTING                                                                                                                                              |
| 82275554     | Allowed     |               | 5/31/2011   |            | 13/149493          | US | EXTERNAL CACHE OPERATION BASED ON CLEAN CASTOUT MESSAGES                                                                                                          |

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| 822/5617     | Granted   | 8886795       | 1/27/2011   | 11/11/2014 | 13/015300          | US | METHOD AND SYSTEM FOR DETERMINING RESPONSE TIME OF A SERVER                                              |
| 822/5623     | Published |               | 1/27/2011   |            | 13/015459          | US | ESTIMATING A FUTURE PROJECT CHARACTERISTIC BASED ON THE SIMILARITY OF PAST PROJECTS                      |
| 822/5626     | Published |               | 1/25/2011   |            | 13/013473          | US | DATA ISOLATION WHILE SHARING INFORMATION BY A PLURALITY OF USERS WHEN EVALUATING PERFORMANCE OF A SERVER |
| 822/5668     | Granted   | 9009719       | 12/16/2010  | 4/14/2015  | 12/970824          | US | COMPUTER WORKLOAD CAPACITY ESTIMATION USING PROXIMITY TABLES (as amended)                                |
| 822/5671     | Published |               | 7/14/2011   |            | 13/182840          | US | AUTOMATIC DISCOVERY OF APPLICATION INFRASTRUCTURE                                                        |
| 822/5677     | Published |               | 1/21/2011   |            | 13/011194          | US | SYSTEM AND METHOD FOR PRESENTING DEVICES THROUGH A SAS INITIATOR-CONNECTED DEVICE                        |
| 822/5689     | Granted   | 8589406       | 3/3/2011    | 11/19/2013 | 13/040216          | US | DEDUPLICATION WHILE REBUILDING INDEXES                                                                   |
| 822/5725     | Granted   | 8667340       | 3/29/2011   | 3/4/2014   | 13/074795          | US | METHOD AND SYSTEM FOR DISTRIBUTED PROCESSING OF ALERTS                                                   |
| 822/5734     | Granted   | 8829735       | 1/28/2011   | 41891      | 13/016850          | US | LOW FREQUENCY RESTORATION                                                                                |
| 822/5743     | Granted   | 8724932       | 1/31/2011   | 5/13/2014  | 13/018301          | US | FIBER-OPTIC MODULATORS                                                                                   |
| 822/5785     | Granted   | 8519803       | 10/29/2010  | 8/27/2013  | 12/915598          | US | RESONATOR SYSTEMS AND METHODS FOR TUNING RESONATOR SYSTEMS                                               |
| 822/5794     | Granted   | 8793427       | 2/10/2011   | 7/29/2014  | 13/024619          | US | REMOTE MEMORY FOR VIRTUAL MACHINES                                                                       |
| 822/5797     | Granted   | 8638600       | 4/22/2011   | 41667      | 13/092789          | US | RANDOM-ACCESS MEMORY WITH DYNAMICALLY ADJUSTABLE ENDURANCE AND RETENTION                                 |
| 822/5800     | Granted   | 8892808       | 4/23/2011   | 11/18/2014 | 13/092911          | US | RETENTION-VALUE ASSOCIATED MEMORY                                                                        |
| 822/5803     | Granted   | 9094466       | 4/7/2011    | 7/28/2015  | 13/082223          | US | MAINTAINING CACHES OF OBJECT LOCATION INFORMATION IN GATEWAY COMPUTING DEVICES USING MULTICAST MESSAGES  |
| 822/5806     | Published |               | 4/23/2011   |            | 13/092912          | US | ADAPTIVE MEMORY SYSTEM                                                                                   |
| 822/5809     | Published |               | 1/26/2011   |            | 13/014694          | US | STORAGE OF DATA OBJECTS BASED ON A TIME OF CREATION                                                      |
| 822/5815     | Granted   | 8639968       | 1/17/2011   | 41667      | 13/007741          | US | COMPUTING SYSTEM RELIABILITY                                                                             |
| 822/5860     | Granted   | 9009428       | 7/8/2011    | 4/14/2015  | 13/179261          | US | DATA STORE PAGE RECOVERY                                                                                 |
| 822/5863     | Granted   | 8595151       | 6/8/2011    | 11/26/2013 | 13/155570          | US | Selecting Sentiment Attributes for Visualization                                                         |
| 822/5869     | Granted   | 9124515       | 11/22/2010  | 9/1/2015   | 12/951748          | US | ELEPHANT FLOW DETECTION IN A COMPUTING DEVICE                                                            |
| 822/5875     | Granted   | 8660979       | 3/3/2011    | 2/25/2014  | 13/040171          | US | Event Prediction                                                                                         |
| 822/5878     | Published |               | 1/31/2011   |            | 13/018018          | US | OPTICAL SYSTEMS IMPLEMENTED WITH THERMALLY CONTROLLED SUB-WAVELENGTH GRATINGS                            |
| 822/6127     | Granted   | D642581       | 7/29/2010   | 7/13/2011  | 29/366783          | US | SERVER                                                                                                   |

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| 82276352     | Granted   | 7653153       | 5/19/2003   | 1/26/2010  | 10/440399          | US | QAM Receiver And Method For Constellations Having A Least Sixteen Symbols                                                                                  |
| 82276490     | Granted   | 7650498       | 4/14/2004   | 1/19/2010  | 10/825596          | US | SECURE DATA PROVISION METHOD AND APPARATUS AND DATA RECOVERY METHOD AND SYSTEM                                                                             |
| 82276619     | Granted   | 7835724       | 9/9/2003    | 11/16/2010 | 10/657237          | US | METHOD AND APPARATUS FOR AUTHENTICATING SERVICE TO A WIRELESS COMMUNICATIONS DEVICE                                                                        |
| 82276925     | Granted   | 7441261       | 6/6/2003    | 10/21/2008 | 10/455405          | US | VIDEO SYSTEM VARYING OVERALL CAPACITY OF NETWORKS OF VIDEO SERVERS FOR SERVING SPECIFIC VIDEO                                                              |
| 82276931     | Published |               | 4/2/2004    |            | 10/817333          | US | METHOD OF PURCHASING INSURANCE OR VALIDATING AN ANONYMOUS TRANSACTION                                                                                      |
| 82276979     | Allowed   |               | 6/9/2003    |            | 10/457091          | US | Propagation Of Viruses Through An Information Technology Network                                                                                           |
| 82277123     | Granted   | 7321660       | 3/3/2003    | 1/22/2008  | 10/379455          | US | METHOD AND APPARATUS FOR ENCRYPTING/DECRYPTING DATA USING TIMED-RELEASE KEYS                                                                               |
| 82277306     | Granted   | 7536471       | 4/1/2004    | 39952      | 10/815512          | US | Use Of Nodes To Monitor Or Manage Peer To Peer Networks                                                                                                    |
| 82277369     | Granted   | 7761418       | 5/19/2004   | 40379      | 10/848570          | US | METHOD AND PRODUCT FOR SHARING LOGGED DATA OBJECTS WITHIN A DISTRIBUTED STORAGE SYSTEM                                                                     |
| 82277726     | Granted   | 7296272       | 5/23/2003   | 11/13/2007 | 10/444096          | US | A SYSTEM IN WHICH A FIRST PROGRAM WRITTEN IN ONE PROGRAMMING LANGUAGE CAN INTERACT AND ACCESS A SECOND PROGRAM WRITTEN IN A DIFFERENT PROGRAMMING LANGUAGE |
|              |           |               |             |            |                    |    | Multiple Voice Channel Communications                                                                                                                      |
| 82277789     | Granted   | 7324636       | 10/23/2003  | 39476      | 10/690663          | US | DTMF Control                                                                                                                                               |
| 82277804     | Granted   | 7142658       | 7/2/2003    | 39049      | 10/610588          | US | Managing Target Computer Using Encapsulated File                                                                                                           |
| 82281299     | Allowed   |               | 2/28/2003   |            | 10/375198          | US | Method, System And Program Storage Device For Providing A Backup Of Data Of A Memory To At Least One Storage Medium                                        |
| 82281305     | Granted   | 6552672       | 3/18/2002   | 37733      | 10/100897          | US |                                                                                                                                                            |
|              |           |               |             |            |                    |    | Data processing system for logging memory access data                                                                                                      |
| 82281425     | Granted   | 7840850       | 4/11/2005   | 40505      | 11/911317          | US | Graphical Interface For Managing Server Environment                                                                                                        |
| 82390914     | Granted   | 8745503       | 10/16/2010  | 6/3/2014   | 12/906090          | US | TRANSLATION LOOK-ASIDE BUFFER                                                                                                                              |
| 82391252     | Granted   | 8429376       | 5/21/2008   | 4/23/2013  | 12/989350          | US | Multi-blade Interconnector                                                                                                                                 |
| 82400886     | Published |               | 6/19/2008   |            | 12/999713          | US | ARRAYS, SYSTEM AND METHOD FOR BI-DIRECTIONAL DATA TRANSMISSION                                                                                             |
| 82405286     | Granted   | 8611758       | 5/7/2008    | 12/17/2013 | 12/991107          | US | IMPEDANCE STABILIZATION                                                                                                                                    |
| 82405526     | Granted   | 8797017       | 5/28/2008   | 8/5/2014   | 12/994997          | US | Hierarchical Passive Networks                                                                                                                              |
| 82405612     | Granted   | 8521023       | 5/8/2008    | 8/27/2013  | 12/991665          | US | System and Method for Component Substitution                                                                                                               |
| 82467396     | Published |               | 1/14/2011   |            | 13/007229          | US | System deconstruction for component substitution                                                                                                           |
| 82467398     | Published |               | 1/14/2011   |            | 13/007252          | US | SYSTEM AND METHOD FOR SUPPLYING MISSING IMPACT FACTORS IN A DATABASE                                                                                       |
| 82467404     | Published |               | 1/14/2011   |            | 13/007073          | US |                                                                                                                                                            |

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| 82467409     | Published |               | 1/14/2011   |            | 13/007175          | US | Sub-tree similarity for component substitution                                                                                                                                                 |
| 82467413     | Published |               | 1/14/2011   |            | 13/007125          | US | System and Method for Tree Creation                                                                                                                                                            |
| 82467421     | Granted   | 8730843       | 1/14/2011   | 5/20/2014  | 13/007152          | US | System and Method for Tree Assessment                                                                                                                                                          |
| 82467475     | Published |               | 3/4/2011    |            | 13/040748          | US | CAPPING DATA CENTER POWER CONSUMPTION                                                                                                                                                          |
| 82467842     | Granted   | 8836536       | 7/29/2011   | 9/16/2014  | 13/194161          | US | DEVICE CHARACTERIZATION SYSTEM AND METHODS                                                                                                                                                     |
| 82559520     | Granted   | 8612662       | 6/1/2008    | 12/17/2013 | 12/995481          | US | Queue Sharing And Reconfiguration In PCI Express Links                                                                                                                                         |
| 82559532     | Granted   | 8595723       | 6/10/2008   | 11/26/2013 | 12/997002          | US | Method And Apparatus For Configuring A Hypervisor During Downtime State                                                                                                                        |
| 82559561     | Granted   | 8208778       | 11/15/2010  | 41086      | 12/946804          | US | Planar Layer With Optical Path                                                                                                                                                                 |
| 82573258     | Granted   | 8458449       | 1/27/2011   | 6/4/2013   | 13/015032          | US | Component Drivers for a Component of a Device                                                                                                                                                  |
| 82573269     | Published |               | 7/2/2008    |            | 12/997478          | US | Verification Of Remote Copies Of Data                                                                                                                                                          |
| 82573280     | Granted   | 8469607       | 5/9/2011    | 6/25/2013  | 13/103575          | US | OPTO-ELECTRONICS WITH COMPLIANT ELECTRICAL CONTACTS                                                                                                                                            |
| 82573930     | Published |               | 4/21/2011   |            | 13/091444          | US | Virtual Address for Virtual Port                                                                                                                                                               |
| 82573982     | Granted   | 8794017       | 6/30/2008   | 8/5/2014   | 13/000012          | US | Cooling Medium Distribution Over A Network Of Passages                                                                                                                                         |
| 82573993     | Granted   | 8727227       | 6/30/2008   | 41779      | 13/000322          | US | Optimizing Fluid Flow Distribution In A Structure                                                                                                                                              |
| 82576206     | Allowed   |               | 6/12/2009   |            | 12/997818          | US | IMPROVEMENTS IN OR RELATING TO COMMUNICATIONS                                                                                                                                                  |
| 82576208     | Granted   | 8390959       | 3/24/2011   | 3/5/2013   | 13/070885          | US | ACTUATOR WITH NON-MOVING MASS                                                                                                                                                                  |
| 82576698     | Published |               | 3/28/2011   |            | 13/073028          | US | AGGREGATING INFORMATION OF DISTRIBUTED JOBS                                                                                                                                                    |
| 82576724     | Granted   | 9135409       | 5/18/2011   | 9/15/2015  | 13/110479          | US | DISTRIBUTING UPDATE INFORMATION BASED ON VALIDATED LICENSE INFORMATION                                                                                                                         |
| 82576738     | Granted   | 8788865       | 7/7/2011    | 7/22/2014  | 13/177576          | US | METHOD AND SYSTEM FOR REDEPLOYING POWERED DEVICES FROM A POWER SOURCING EQUIPMENT WITH INSUFFICIENT POWER CAPACITY TO ANOTHER POWER SOURCING EQUIPMENT WITH EXCESS POWER CAPACITY (as amended) |
| 82576902     | Published |               | 7/12/2011   |            | 13/181059          | US | Visually Representing How a Sentiment Score is Computed                                                                                                                                        |
| 82576918     | Granted   | D732547       | 1/31/2011   | 6/23/2015  | 29/384499          | US | BEZEL WITH DOCKING RECESS                                                                                                                                                                      |
| 82576933     | Granted   | D647903       | 1/31/2011   | 40848      | 29/384498          | US | PORTABLE SERVER MONITOR                                                                                                                                                                        |
| 82577036     | Granted   | 8842119       | 11/17/2010  | 9/23/2014  | 12/948538          | US | DISPLAYING SYSTEM PERFORMANCE INFORMATION                                                                                                                                                      |
| 82577119     | Granted   | 8730809       | 1/19/2011   | 5/20/2014  | 13/009548          | US | METHODS FOR PACKET FORWARDING THROUGH A COMMUNICATION LINK OF A DISTRIBUTED LINK AGGREGATION GROUP USING MESH TAGGING                                                                          |
| 82577231     | Published |               | 12/10/2010  |            | 12/965457          | US | Communication-Link-Attached Persistent Memory System                                                                                                                                           |
| 82578699     | Granted   | 8670310       | 12/21/2010  | 3/11/2014  | 12/974767          | US | Dynamic Balancing Priority Queue Assignments for Quality-of-Service Network Flows                                                                                                              |
| 82578745     | Granted   | 7792802       | 3/2/2007    | 40428      | 11/681738          | US | Archiving Logs with Snapshots for Data Recovery                                                                                                                                                |
| 82578805     | Granted   | 6657868       | 11/21/2001  | 12/2/2003  | 09/990106          | US | Electronic Device Mount Assembly                                                                                                                                                               |

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| 82578819     | Granted | 7093278       | 5/8/2002    | 8/15/2006  | 10/142398          | US | Remote Console for Monitor and Control of System Firmware                                     |
| 82578822     | Granted | 7111157       | 5/8/2002    | 9/19/2006  | 10/142402          | US | Spurious Input Detection for Firmware                                                         |
| 82578836     | Granted | 7100089       | 9/6/2002    | 38958      | 10/237432          | US | Determining Differences Between Snapshots                                                     |
| 82578839     | Granted | 7155635       | 2/6/2004    | 39077      | 10/773699          | US | Handling Link Failures in Remote Mirroring Applications                                       |
| 82578850     | Granted | 7058957       | 7/12/2002   | 38874      | 10/194710          | US | Snapshots                                                                                     |
| 82578854     | Granted | 7032093       | 8/6/2003    | 38825      | 10/636145          | US | Cluster Event Notification System                                                             |
| 82578857     | Granted | 6823442       | 5/7/2004    | 38314      | 10/840956          | US | On-Demand Allocation Of Physical Storage For Virtual Volumes                                  |
| 82578862     | Granted | 7502903       | 11/7/2005   | 3/10/2009  | 11/269399          | US | THIN-PROVISIONING WITH SNAPSHOT TECHNOLOGY                                                    |
| 82578871     | Granted | 7622945       | 12/20/2006  | 40141      | 11/614031          | US | Method and Apparatus for Managing Data Storage Systems                                        |
| 82578902     | Granted | 7953899       | 8/21/2002   | 5/31/2011  | 10/227077          | US | Mix Mode Driver for Traces of Different Lengths                                               |
| 82578913     | Granted | 7836329       | 12/29/2000  | 11/16/2010 | 09/751649          | US | Universal Diagnostic Hardware Space Access System for Firmware                                |
| 82578916     | Granted | 8037026       | 7/1/2005    | 10/11/2011 | 11/173101          | US | Communication Link Protocol Optimized for Storage Architectures                               |
| 82578917     | Granted | 7823003       | 1/23/2007   | 10/26/2010 | 11/626265          | US | Protected User-Controllable Volume Snapshots                                                  |
| 82578922     | Granted | 8244930       | 5/5/2010    | 8/14/2012  | 12/774280          | US | VOLTAGE REFERENCING CLOCK FOR SOURCE-SYNCHRONOUS MULTI-LEVEL SIGNAL BUSES                     |
| 82578928     | Granted | 7886119       | 2/27/2007   | 40582      | 11/679728          | US | Mechanisms for Synchronizing Data Transfers Between Non-Uniform Memory Architecture Computers |
| 82578996     | Granted | 8533775       | 6/13/2008   | 9/10/2013  | 12/997605          | US | Time and Space Efficient Technique for Creating Virtual Volume Copies                         |
| 82579206     | Granted | 7376969       | 12/2/2002   | 39588      | 10/308415          | US | Hierarchical Policy Management                                                                |
| 82579220     | Granted | 7788722       | 12/2/2002   | 8/31/2010  | 10/308548          | US | Real Time Monitoring And Analysis Of Events From Multiple Network Security Devices            |
| 82579228     | Granted | 7899901       | 12/2/2002   | 3/1/2011   | 10/308416          | US | Modular Agent For Network Security Intrusion Detection System                                 |
| 82579234     | Granted | 8365278       | 9/10/2009   | 41303      | 12/557229          | US | Method And Apparatus For Exercising And Debugging Correlations For Network Security System    |
| 82579249     | Granted | 7219239       | 12/2/2002   | 5/15/2007  | 10/308585          | US | Displaying Information Regarding Time-Based Events                                            |
| 82579260     | Granted | 7861299       | 8/9/2007    | 40540      | 11/836251          | US | Method For Batching Events For Transmission By Software Agent                                 |
| 82579266     | Granted | 8230512       | 6/26/2009   | 7/24/2012  | 12/493012          | US | Threat Detection In A Network Security System                                                 |
| 82579271     | Granted | 7333999       | 10/30/2003  | 2/19/2008  | 10/698814          | US | Timestamp Modification In A Network Security System                                           |
| 82579283     | Granted | 8528077       | 4/9/2004    | 41520      | 10/821459          | US | Expression Editor                                                                             |
| 82579286     | Granted | 7509677       | 5/4/2004    | 3/24/2009  | 10/839613          | US | Comparing Events From Multiple Network Security Devices                                       |
| 82579317     | Granted | 764438        | 10/27/2004  | 1/5/2010   | 10/975962          | US | Pattern Discovery In A Network Security System                                                |
| 82579332     | Granted | 7809131       | 12/23/2004  | 10/5/2010  | 11/021601          | US | Security Event Aggregation At Software Agent                                                  |
|              |         |               |             |            |                    |    | Adjusting Sensor Time In A Network Security System                                            |

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| 82579337     | Granted   | 7844999       | 3/1/2005    | 11/30/2010 | 11/070024          | US | Message Parsing In A Network Security System                                                                             |
| 82579378     | Published |               | 10/24/2007  |            | 11/923502          | US | Tracking Changing State Data to Assist In Computer Network Security                                                      |
| 82579397     | Granted   | 8108550       | 10/24/2007  | 1/31/2012  | 11/923513          | US | Real-Time Identification Of An Asset Model And Categorization Of An Asset To Assist In Computer Network Security         |
| 82580851     | Granted   | 7571225       | 6/28/2007   | 8/4/2009   | 11/770454          | US | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                                                       |
| 82580955     | Granted   | 8565933       | 7/31/2008   | 10/22/2013 | 13/056105          | US | Heatsink With A Plurality Of Fans                                                                                        |
| 82580994     | Allowed   |               | 3/14/2011   |            | 13/046848          | US | ZONE-BASED NETWORK TRAFFIC ANALYSIS                                                                                      |
| 82580998     | Granted   | 8881110       | 3/14/2011   | 11/4/2014  | 13/047209          | US | ROLE-BASED AUTOMATION SCRIPTS                                                                                            |
| 82581166     | Granted   | 7975306       | 12/10/2004  | 7/5/2011   | 11/009572          | US | APPARATUS AND METHOD FOR MONITORING SECURE SOFTWARE                                                                      |
| 82581189     | Granted   | 8528093       | 4/11/2007   | 9/3/2013   | 11/734114          | US | Apparatus and Method for Performing Dynamic Security Testing with Static Analysis Data                                   |
| 82581207     | Granted   | 8209646       | 11/2/2007   | 6/26/2012  | 11/934717          | US | Apparatus and Method for Analyzing Source Code Using Path Analysis and Boolean Satisfiability                            |
| 82581212     | Granted   | 8527975       | 11/2/2007   | 9/3/2013   | 11/934722          | US | Apparatus and Method for Analyzing Source Code Using Memory Operation Evaluation and Boolean Satisfiability              |
| 82581269     | Published |               | 3/11/2011   |            | 13/046400          | US | DATABASE DATA LOCALIZATION                                                                                               |
| 82581324     | Granted   | 8884966       | 8/24/2011   | 11/11/2014 | 13/216477          | US | VISUALIZING A SCATTER PLOT USING REAL-TIME BACKWARD REWRITE                                                              |
| 82581329     | Published |               | 10/21/2011  |            | 13/278183          | US | DISPLAYING ITEMS IN SORTED ORDER, AND DISPLAYING EACH ITEM IN MANNER CORRESPONDING TO OR BASED ON ITEM'S RELEVANCE SCORE |
| 82581555     | Published |               | 3/29/2011   |            | 13/074720          | US | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE TO AUTOCOMplete APPLICATION LIFECYCLE MANAGEMENT ENTITIES                 |
| 82581579     | Granted   | 8762502       | 10/25/2011  | 6/24/2014  | 13/281038          | US | INSTALLATION OF SERVER-STORED DISK IMAGE ON CLIENT                                                                       |
| 82582735     | Granted   | 8806372       | 11/7/2010   | 8/12/2014  | 12/941064          | US | Displaying Network Properties In A Graphical User Interface                                                              |
| 82585205     | Granted   | 8291579       | 1/24/2011   | 10/23/2012 | 13/012504          | US | Gearred Insertion Apparatus For a PCA                                                                                    |
| 82585280     | Published |               | 3/31/2011   |            | 13/077367          | US | MULTILEVEL INDEXING SYSTEM                                                                                               |
| 82585282     | Granted   | 8868855       | 2/28/2011   | 10/21/2014 | 13/036948          | US | Efficiently and Effectively Managing Request Throughput in a Distributed Systems Environment                             |
| 82585288     | Granted   | 8671086       | 3/3/2011    | 3/11/2014  | 13/039423          | US | PREFETCHING CONTENT OF A DIRECTORY BY EXECUTING A DIRECTORY ACCESS COMMAND                                               |
| 82585626     | Granted   | 9014203       | 12/15/2010  | 4/21/2015  | 12/969286          | US | Space Time Power Scheduling For Wireless Networks                                                                        |

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| 82585683     | Granted   | 8725904       | 8/18/2011   | 5/13/2014  | 13/212727          | US | Management Processors, Methods and Articles of Manufacture                                                                                  |
| 82585740     | Published |               | 5/3/2011    |            | 13/099851          | US | ZONE GROUP MANAGER VIRTUAL PHY                                                                                                              |
| 82586622     | Published |               | 7/1/2008    |            | 12/999209          | US | Virtualizing A Video Controller                                                                                                             |
| 82586665     | Granted   | 8966210       | 4/4/2011    | 2/24/2015  | 13/079554          | US | ZONE GROUP CONNECTIVITY INDICATOR                                                                                                           |
| 82588205     | Granted   | 8144716       | 12/17/2010  | 3/27/2012  | 12/972084          | US | Method And System For Providing Telecommunication Subscriber Services Without Provisioning Or Maintenance                                   |
| 82595313     | Granted   | 9049034       | 2/2/2011    | 6/2/2015   | 13/019310          | US | Multicast Flow Monitoring                                                                                                                   |
| 82595359     | Granted   | 9122809       | 7/1/2008    | 9/1/2015   | 13/000246          | US | Segmenting Bus Topology                                                                                                                     |
| 82595413     | Granted   | 8959233       | 2/23/2011   | 2/17/2015  | 13/033250          | US | NETWORK BOTTLENECKS                                                                                                                         |
| 82595418     | Granted   | 9110591       | 4/22/2011   | 8/18/2015  | 13/092471          | US | MEMORY RESOURCE PROVISIONING USING SAS ZONING                                                                                               |
| 82595670     | Granted   | 8369665       | 7/14/2008   | 2/5/2013   | 13/002763          | US | Hybrid Guided-Mode Resonance Filter And Method Employing Distributed Bragg Reflection                                                       |
| 82595711     | Published |               | 11/4/2011   |            | 13/288996          | US | Managing Chip Multi-Processors Through Virtual Domains                                                                                      |
| 82595719     | Granted   | 9110703       | 6/7/2011    | 8/18/2015  | 13/155165          | US | VIRTUAL MACHINE PACKET PROCESSING                                                                                                           |
| 82595725     | Allowed   |               | 10/17/2011  |            | 13/275030          | US | Method of and Apparatus for Managing Non-Congestion-Controlled Message Traffic in a Datacenter                                              |
| 82595731     | Granted   | 8661298       | 4/29/2011   | 2/25/2014  | 13/098172          | US | CONTROLLING NANOSTORE OPERATION BASED ON MONITORED PERFORMANCE                                                                              |
| 82603067     | Published |               | 1/7/2011    |            | 12/986676          | US | Decision Support                                                                                                                            |
| 82604267     | Granted   | 8799916       | 2/2/2011    | 8/5/2014   | 13/019529          | US | DETERMINING AN ALLOCATION OF RESOURCES FOR A JOB                                                                                            |
| 82613092     | Granted   | 9009281       | 7/1/2011    | 42108      | 13/175211          | US | Composition of Services                                                                                                                     |
| 82615979     | Granted   | 9094316       | 1/28/2011   | 7/28/2015  | 13/015896          | US | DYNAMIC NAME GENERATION                                                                                                                     |
| 82618107     | Published |               | 3/31/2011   |            | 13/077137          | US | Grouping Data                                                                                                                               |
| 82618416     | Granted   | 8751205       | 6/29/2011   | 6/10/2014  | 13/172553          | US | GENERATING DISCRETE EVENT SIMULATION DATA                                                                                                   |
| 82618418     | Granted   | 8805870       | 7/27/2011   | 8/12/2014  | 13/192373          | US | Multi-Input, Multi-Output-Per-Input User-Defined-Function-Based Database Operations                                                         |
| 82618421     | Granted   | 8700822       | 7/8/2011    | 4/15/2014  | 13/179188          | US | PARALLEL AGGREGATION SYSTEM                                                                                                                 |
| 82620394     | Granted   | 8774625       | 8/8/2008    | 41828      | 13/058024          | US | Method And Systems For Implementing High-radix Switch Topologies On Relatively Lower-radix Switch Physical Networks                         |
| 82629490     | Granted   | 8924639       | 8/8/2008    | 12/30/2014 | 13/058048          | US | Independently Controllable And Reconfigurable Virtual Memory Devices In Memory Modules That Are Pin-compatible With Standard Memory Modules |
| 82629550     | Granted   | 8812886       | 8/13/2008   | 41870      | 13/058067          | US | Dynamic Utilization Of Power-down Modes In Multi-core Memory Modules                                                                        |
| 82631635     | Published |               | 7/31/2008   |            | 13/056101          | US | Multi-layer Reconfigurable Switches                                                                                                         |
| 82635041     | Published |               | 7/31/2008   |            | 13/056096          | US | GEARED LATCH APPARATUS                                                                                                                      |

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| 82636541     | Granted   | 8990405       | 4/1/2011    | 3/24/2015  | 13/078636          | US | METHODS, SYSTEMS AND ARTICLES OF MANUFACTURE<br>RESUME A<br>REMOTE DESKTOP SESSION   |
| 82638140     | Granted   | 8845188       | 1/31/2011   | 9/30/2014  | 13/018101          | US | Apparatus State Determination Method And System                                      |
| 82640047     | Granted   | 8505009       | 2/4/2011    | 41492      | 13/020813          | US | MANAGING EXCLUSIVE ACCESS TO SYSTEM RESOURCES                                        |
| 82640499     | Granted   | 9069780       | 5/23/2011   | 6/30/2015  | 13/113413          | US | PROPAGATING A SNAPSHOT ATTRIBUTE IN A DISTRIBUTED<br>FILE SYSTEM                     |
| 82640505     | Published |               | 5/2/2011    |            | 13/098785          | US | REDUCING A NOISE COMPONENT ASSOCIATED WITH<br>MOVEMENT OF A<br>MOVEABLE PART         |
| 82644413     | Granted   | 8560679       | 2/18/2011   | 10/15/2013 | 13/031079          | US | Method And Apparatus For Exercising And Debugging<br>Correlations For Network System |
| 82653962     | Published |               | 8/29/2011   |            | 13/220238          | US | COMMUNICATIONS PATH DISCOVERY                                                        |
| 82654165     | Published |               | 8/19/2009   |            | 13/060487          | US | Method And Apparatus For Storing And Verifying Data                                  |
| 82654171     | Granted   | 8166171       | 3/26/2005   | 41023      | 13/045216          | US | Provision Of Resource Allocation Information                                         |
| 82654416     | Granted   | 8549219       | 12/7/2010   | 10/1/2013  | 12/961778          | US | PREVENTING HARD DRIVE FAILURE AND DATA LOSS DUE TO<br>VIBRATION                      |
| 82654460     | Granted   | 8655124       | 9/4/2008    | 2/18/2014  | 13/061449          | US | DIELECTRIC WAVEGUIDE INTERSECTION WITH REDUCED<br>LOSSES                             |
| 82656102     | Published |               | 10/30/2008  |            | 13/124831          | US | Supply And Demand Consolidation In Employee Resource<br>Planning                     |
| 82660164     | Granted   | 8656194       | 3/7/2011    | 2/18/2014  | 13/042086          | US | Method And System For Distributing Power To Networked<br>Devices                     |
| 82662329     | Published |               | 5/20/2011   |            | 13/112677          | US | DETERMINING WORKLOAD COST                                                            |
| 82663153     | Published |               | 10/11/2011  |            | 13/270512          | US | IDENTIFYING USERS THROUGH A PROXY                                                    |
| 82663233     | Published |               | 6/16/2011   |            | 13/162063          | US | PARSING AN IMAGE OF A VISUALLY STRUCTURED DOCUMENT                                   |
| 82663244     | Published |               | 7/15/2011   |            | 13/183715          | US | REFLECTING CHANGES TO GRAPH-STRUCTURED DATA                                          |
| 82663247     | Published |               | 8/5/2011    |            | 13/198893          | US | SYSTEM AND METHOD FOR MANAGING ENVIRONMENT<br>CONFIGURATION USING SNAPSHOTS          |
| 82663259     | Published |               | 6/22/2011   |            | 13/166385          | US | CONSTRAINT DEFINITION FOR CAPACITY MANAGEMENT                                        |
| 82663408     | Granted   | 8918571       | 6/1/2011    | 12/23/2014 | 13/151009          | US | EXPOSING EXPANDERS IN A DATA STORAGE FABRIC                                          |
| 82664014     | Published |               | 10/18/2011  |            | 13/275340          | US | MAPPING SOFTWARE MODULES TO SOURCE CODE                                              |
| 82664833     | Published |               | 10/31/2011  |            | 13/285973          | US | Methods and Apparatus to Control Generation of Memory<br>Access Requests             |
| 82664848     | Published |               | 10/11/2011  |            | 13/270785          | US | METHODS, APPARATUS, AND ARTICLES OF MANUFACTURE<br>TO MANAGE MEMORY                  |
| 82664887     | Granted   | 8788904       | 10/31/2011  | 7/22/2014  | 13/285742          | US | METHODS AND APPARATUS TO PERFORM ERROR DETECTION<br>AND CORRECTION                   |

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| 82664931     | Granted   | 8478900       | 5/18/2011   | 41457      | 13/110423          | US | DETERMINING MISCONNECTION OF AN ELECTRONIC DEVICE TO A NETWORK DEVICE USING ZONE INFORMATION                           |
| 82670355     | Granted   | 9069470       | 4/1/2011    | 6/30/2015  | 13/078449          | US | Zone Group Reassignment Using Storage Device Signatures                                                                |
| 82671800     | Granted   | 8938759       | 9/3/2009    | 1/20/2015  | 13/063431          | US | Program Guide And Apparatus                                                                                            |
| 82671980     | Granted   | 8975902       | 12/9/2008   | 3/10/2015  | 13/133267          | US | Power Circuit                                                                                                          |
| 82671986     | Published |               | 12/15/2008  |            | 13/133314          | US | Detecting An Unreliable Link In A Computer System                                                                      |
| 82671992     | Granted   | 8515916       | 9/28/2011   | 8/20/2013  | 13/247716          | US | DATA ARCHIVING METHODS AND DATA ARCHIVING APPARATUS                                                                    |
| 82672012     | Granted   | 8650145       | 10/7/2008   | 2/11/2014  | 13/121713          | US | Creating Snapshots Of Data Using A Selected One Of Different Snapshot Algorithms                                       |
| 82672032     | Granted   | 8676765       | 7/12/2011   | 41716      | 13/181014          | US | DATABASE ARCHIVING PERFORMANCE BENEFIT DETERMINATION                                                                   |
| 82672040     | Granted   | 8582246       | 10/15/2008  | 41590      | 13/121738          | US | Individually Adjusting A Position Of An Access Head Element On A Head Assembly                                         |
| 82672067     | Published |               | 6/30/2011   |            | 13/173862          | US | CAPTURING AN ARCHIVING SNAPSHOT                                                                                        |
| 82674162     | Granted   | 8843667       | 6/29/2011   | 9/23/2014  | 13/171995          | US | DATA STORAGE METHODS AND DATA STORAGE SYSTEMS                                                                          |
| 82674193     | Granted   | 8732365       | 6/7/2011    | 5/20/2014  | 13/154611          | US | INPUT/OUTPUT SYSTEM AND METHODS TO COUPLE A STORAGE DEVICE TO THE SAME SERVER AFTER MOVEMENT IN AN INPUT/OUTPUT SYSTEM |
| 82674211     | Granted   | 8831785       | 10/30/2008  | 9/9/2014   | 13/127233          | US | MULTI-STAGE HUMIDITY CONTROL SYSTEM AND METHOD                                                                         |
| 82675347     | Granted   | 8634963       | 11/13/2009  | 41660      | 13/132866          | US | Data Centre And Apparatus And Method For Data Centre Cooling                                                           |
| 82675356     | Published |               | 8/11/2011   |            | 13/208316          | US | System And Method For Analysis Of Large-scale Resource Contention Across Enterprise Activities                         |
| 82675358     | Granted   | 8875301       | 10/12/2011  | 41940      | 13/271538          | US | Software License Incompatibility Determination                                                                         |
| 82675561     | Granted   | 8178842       | 3/12/2009   | 41044      | 13/063430          | US | NANOWIRE BOLOMETER PHOTODETECTOR                                                                                       |
| 82675581     | Granted   | 8635389       | 5/24/2011   | 1/21/2014  | 13/114676          | US | Variable Depth Buffer                                                                                                  |
| 82676529     | Allowed   |               | 4/7/2011    |            | 13/082130          | US | Minimal Synchronized Network Operations                                                                                |
| 82676540     | Published |               | 10/14/2008  |            | 13/123644          | US | Managing Event Traffic In A Network System                                                                             |
| 82676557     | Granted   | 9161239       | 4/6/2011    | 42290      | 13/080898          | US | Network Access Point Management                                                                                        |
| 82676586     | Granted   | 8620908       | 10/15/2008  | 12/31/2013 | 13/123686          | US | Retrieving Configuration Records From A Configuration Management Database                                              |
| 82676607     | Granted   | 8635498       | 10/16/2008  | 41660      | 13/123702          | US | PERFORMANCE ANALYSIS OF APPLICATIONS                                                                                   |
| 82677093     | Granted   | 8780730       | 5/2/2011    | 41835      | 13/098491          | US | LOAD-BALANCING GATEWAYS                                                                                                |
| 82677110     | Granted   | 8719478       | 8/11/2011   | 41765      | 13/207839          | US | DEADLOCK PREVENTION                                                                                                    |
| 82678313     | Granted   | 8547727       | 12/12/2008  | 41548      | 13/119932          | US | Memristive Device                                                                                                      |
| 82678315     | Granted   | 8659510       | 12/16/2008  | 41695      | 13/119934          | US | Spatial Light Modulator                                                                                                |

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| 82678321     | Granted   | 8780606       | 12/23/2008  | 41835      | 13/120904          | US | Memristive Device Having A Porous Dopant Diffusion Element                                   |
| 82678327     | Granted   | 8582344       | 12/30/2008  | 11/12/2013 | 13/120903          | US | Multiplexer/de-multiplexer Memristive Device                                                 |
| 82678579     | Granted   | 8373584       | 5/16/2011   | 41317      | 13/108530          | US | COMPRESSING AND DECOMPRESSING DATA                                                           |
| 82680227     | Granted   | 9142224       | 10/24/2008  | 42269      | 13/124646          | US | Magnetic-tape Drive And Magnetic-tape Head Compatible With Multiple Tape Formats             |
| 82681103     | Published |               | 10/31/2011  |            | 13/285888          | US | ACCESS TO HETEROGENEOUS DATA SOURCES                                                         |
| 82682134     | Granted   | 9054593       | 6/2/2011    | 6/9/2015   | 13/151939          | US | IMPEDANCE CONTROL FOR A POWER CONVERTER                                                      |
| 82683611     | Granted   | 8582422       | 4/5/2011    | 11/12/2013 | 13/080404          | US | Access Point Configuration Propagation                                                       |
| 82683616     | Granted   | 8611358       | 4/6/2011    | 12/17/2013 | 13/081310          | US | Mobile Network Traffic Management                                                            |
| 82683628     | Granted   | 8856580       | 4/7/2011    | 10/7/2014  | 13/081934          | US | Controller Election                                                                          |
| 82687401     | Granted   | 8819636       | 3/24/2011   | 8/26/2014  | 13/070499          | US | Testing Compatibility Of A Computer Application                                              |
| 82689078     | Granted   | 8539113       | 6/16/2011   | 41534      | 13/161894          | US | INDICATORS FOR STREAMS ASSOCIATED WITH MESSAGES                                              |
| 82689167     | Granted   | 8766228       | 10/29/2008  | 7/1/2014   | 13/121133          | US | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein      |
| 82689169     | Allowed   |               | 7/21/2011   |            | 13/187800          | US | SENDING REQUEST MESSAGES TO NODES INDICATED AS UNRESOLVED                                    |
| 82689173     | Granted   | 8908711       | 11/1/2011   | 12/9/2014  | 13/286391          | US | TARGET ISSUE INTERVALS                                                                       |
| 82689187     | Granted   | 8605483       | 12/23/2008  | 12/10/2013 | 13/120905          | US | Memristive Device And Methods Of Making And Using The Same                                   |
| 82690020     | Granted   | 9112820       | 7/31/2012   | 42234      | 13/562901          | US | DELAY QUEUES BASED ON DELAY REMAINING                                                        |
| 82690028     | Granted   | 8830838       | 9/14/2011   | 9/9/2014   | 13/232645          | US | NODE INTERFACE INDICATORS                                                                    |
| 82690114     | Published |               | 6/9/2011    |            | 13/157009          | US | Time Encoding Using Integrate and Fire Sampler                                               |
| 82690125     | Published |               | 9/1/2011    |            | 13/224090          | US | COMBINING DATA VALUES THROUGH ASSOCIATIVE OPERATIONS                                         |
| 82690137     | Published |               | 5/19/2011   |            | 13/111740          | US | Storing Events From a Datastream                                                             |
| 82690143     | Published |               | 10/27/2011  |            | 13/282870          | US | MAINTAINING A BUFFER STATE IN A DATABASE QUERY ENGINE                                        |
| 82690151     | Published |               | 8/23/2011   |            | 13/215322          | US | CONSTRUCTING AN ASSOCIATION DATA STRUCTURE TO VISUALIZE ASSOCIATION AMONG CO-OCCURRING TERMS |
| 82690318     | Published |               | 10/15/2008  |            | 13/123563          | US | Locating A Head Element Of A Tape Storage Device Using Servo Information In A Data Track     |
| 82693706     | Published |               | 7/28/2011   |            | 13/193292          | US | SYSTEMS AND METHODS OF ACCELERATING DELIVERY OF REMOTE CONTENT                               |
| 82695681     | Granted   | 9003247       | 4/28/2011   | 42101      | 13/066976          | US | Remapping Data with Pointer                                                                  |
| 82714717     | Granted   | 8140779       | 5/4/2011    | 40988      | 13/100435          | US | Method Of Storing Data On A Secondary Storage Device                                         |
| 82715747     | Granted   | 8752175       | 10/31/2008  | 41800      | 13/126335          | US | Method And Apparatus For Network Intrusion Detection                                         |
| 82716617     | Published |               | 10/30/2008  |            | 13/126032          | US | BIT Inversion For Communication Interface                                                    |
| 82716672     | Published |               | 10/31/2008  |            | 13/126848          | US | DEVICE FOR OPTICALLY COUPLING PHOTONIC ELEMENTS                                              |

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| 82716721     | Granted   | 8687961       | 10/31/2008  | 4/1/2014   | 13/126840          | US | Optical Broadcast With Buses With Shared Optical Interferes                     |
| 82716732     | Granted   | 8542961       | 10/31/2008  | 9/24/2013  | 13/126845          | US | Optical Beam Couplers And Splitters                                             |
| 82718595     | Published |               | 1/27/2010   |            | 13/146726          | US | REVERSE CHARGE CALLING IN A COMMUNICATIONS NETWORK                              |
| 82718607     | Granted   | D685373       | 5/6/2011    | 7/2/2013   | 29/391362          | US | Computing Device Protector                                                      |
| 82728107     | Published |               | 12/19/2008  |            | 13/140603          | US | Redundant Data Storage For Uniform Read Latency                                 |
| 82734651     | Granted   | 8291208       | 5/6/2011    | 10/16/2012 | 13/102365          | US | Bios Bootable Raid Support                                                      |
| 82734703     | Granted   | 8611042       | 1/29/2009   | 12/17/2013 | 13/146933          | US | HANDLING OF STORAGE MEDIA CARTRIDGES                                            |
| 82734766     | Granted   | 8268534       | 5/4/2011    | 9/18/2012  | 13/100458          | US | SELF-ALIGNED, SUB-WAVELENGTH OPTICAL LITHOGRAPHY                                |
| 82734768     | Granted   | 8202755       | 5/16/2011   | 41079      | 13/108733          | US | PHOTODIODE MODULE AND APPARATUS INCLUDING MULTIPLE PHOTODIODE MODULES           |
| 82740324     | Granted   | 8315169       | 6/1/2011    | 11/20/2012 | 13/150830          | US | Loadbalancing Network Traffic Across Multiple Remote Inspection Devices         |
| 82741095     | Published |               | 5/13/2011   |            | 13/107108          | US | AUTOMATED NEGOTIATION                                                           |
| 82744692     | Published |               | 1/12/2009   |            | 13/143162          | US | Reducing Propagation Of Message Floods In Computer Networks                     |
| 82744716     | Published |               | 6/9/2011    |            | 13/156869          | US | Power Sharing With Stackable Switches                                           |
| 82744758     | Granted   | 9047606       | 9/29/2011   | 6/2/2015   | 13/248706          | US | SOCIAL AND CONTEXTUAL RECOMMENDATIONS                                           |
| 82746396     | Published |               | 12/30/2008  |            | 13/139762          | US | Storing Network Flow Information                                                |
| 82747673     | Granted   | 8502188       | 1/29/2009   | 8/6/2013   | 13/142504          | US | Electrically Actuated Device                                                    |
| 82747675     | Granted   | 8605484       | 1/29/2009   | 41618      | 13/130822          | US | Self-repairing Memristor And Method                                             |
| 82747687     | Granted   | 8461565       | 1/29/2009   | 6/11/2013  | 13/130811          | US | Electrically Actuated Devices                                                   |
| 82747695     | Granted   | 8878342       | 1/26/2009   | 11/4/2014  | 13/130801          | US | USING ALLOY ELECTRODES TO DOPE MEMRISTORS                                       |
| 82747724     | Granted   | 8431921       | 1/13/2009   | 4/30/2013  | 13/130827          | US | Memristor Having A Triangular Shaped Electrode                                  |
| 82747727     | Granted   | 9041157       | 1/14/2009   | 5/26/2015  | 13/130808          | US | Method For Doping An Electrically Actuated Device                               |
| 82747729     | Granted   | 8614432       | 6/14/2011   | 41632      | 13/139557          | US | Crystalline Silicon-Based Memristive Device with Multiple Mobile Dopant Species |
| 82748351     | Allowed   |               | 10/28/2011  |            | 13/284570          | US | DISPLAYING A VISUALIZATION OF A PORTION OF A ROLLING HORIZON TIME SERIES        |
| 82749072     | Published |               | 8/31/2011   |            | 13/222182          | US | Automating Software Testing                                                     |
| 82749110     | Published |               | 7/1/2011    |            | 13/175613          | US | SURROGATE KEY GENERATION                                                        |
| 82749118     | Granted   | 9135071       | 8/19/2011   | 42262      | 13/213582          | US | SELECTING PROCESSING TECHNIQUES FOR A DATA FLOW TASK                            |
| 82749143     | Granted   | 8594096       | 10/31/2011  | 41604      | 13/285498          | US | DYNAMIC HARDWARE ADDRESS ASSIGNMENT TO NETWORK DEVICES IN A SWITCH MESH         |
| 82749161     | Granted   | 8239599       | 6/16/2011   | 41128      | 13/162348          | US | System And Method For Handling Data Streams                                     |
| 82750088     | Published |               | 6/30/2011   |            | 13/173500          | US | HINGED BEZEL HAVING A PORTABLE DISPLAY DOCK                                     |

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| 82752143     | Published |               | 10/28/2011  |            | 13/284581          | US | EXPANDER TO ENABLE VIRTUAL STORAGE UNITS<br>CORRESPONDING TO SUBDIVISIONS WITHIN A PHYSICAL<br>STORAGE UNIT |
| 82752147     | Published |               | 10/12/2011  |            | 13/271563          | US | PERFORMANCE ASSIST STORAGE VOLUMES                                                                          |
| 82752184     | Granted   | 8547967       | 6/21/2011   | 41548      | 13/165535          | US | Method And Apparatus For Pstn-based IP Active Call<br>Recovery And Re-routing                               |
| 82752441     | Published |               | 7/27/2011   |            | 13/192010          | US | SAS VIRTUAL TAPE DRIVE                                                                                      |
| 82753492     | Granted   | 8769609       | 7/5/2011    | 7/1/2014   | 13/176581          | US | Protecting File Entities                                                                                    |
| 82753552     | Granted   | 8620987       | 9/10/2011   | 12/31/2013 | 13/229710          | US | Multi-Regime Detection in Streaming Data                                                                    |
| 82753560     | Granted   | 8683125       | 11/1/2011   | 41723      | 13/286681          | US | TIER IDENTIFICATION (TID) FOR TIERED MEMORY<br>CHARACTERISTICS                                              |
| 82753566     | Granted   | 8688620       | 9/23/2011   | 4/1/2014   | 13/243476          | US | Anomaly detection in data centers                                                                           |
| 82753580     | Granted   | 8988258       | 10/31/2011  | 42087      | 13/285492          | US | HARDWARE COMPRESSION USING COMMON PORTIONS OF<br>DATA                                                       |
| 82753586     | Granted   | 8954599       | 10/28/2011  | 2/10/2015  | 13/284389          | US | DATA STREAM OPERATIONS                                                                                      |
| 82753595     | Published |               | 10/31/2011  |            | 13/285675          | US | MANAGING A VERSION OF A NON-VOLATILE HEAP (as<br>amended)                                                   |
| 82753686     | Granted   | 8838854       | 6/22/2011   | 9/16/2014  | 13/166032          | US | A SWITCH THAT PROCESSES A TERMINAL DATA STREAM<br>Parallel Memory Device Rank Selection                     |
| 82754557     | Granted   | 8275956       | 6/24/2011   | 9/25/2012  | 13/168455          | US | TRANSLATING NATURAL LANGUAGE QUERIES                                                                        |
| 82755123     | Published |               | 9/28/2011   |            | 13/247266          | US | USING A DATABASE TO TRANSLATE A NATURAL KEY TO A<br>SURROGATE KEY                                           |
| 82755135     | Published |               | 10/19/2011  |            | 13/276803          | US | OPTOELECTRONIC INTERFACE                                                                                    |
| 82755911     | Granted   | 9014519       | 10/14/2011  | 42115      | 13/273983          | US | SEMICONDUCTOR STRUCTURE HAVING AN ELOG ON A<br>THERMALLY AND ELECTRICALLY CONDUCTIVE MASK                   |
| 82756289     | Granted   | 8368118       | 12/16/2008  | 41310      | 13/133370          | US | OVERWRITING A MEMORY ARRAY                                                                                  |
| 82756380     | Granted   | 8537596       | 10/21/2011  | 9/17/2013  | 13/278882          | US | OUTPUT FIELD MAPPING OF USER DEFINED FUNCTIONS IN<br>DATABASES                                              |
| 82756415     | Granted   | 8856151       | 9/30/2011   | 41919      | 13/249482          | US | MANAGING AN INFORMATION TECHNOLOGY SYSTEM                                                                   |
| 82757135     | Granted   | 8589200       | 6/28/2011   | 11/19/2013 | 13/171145          | US | ESTABLISHING A CONNECTION WITH A USER DEVICE                                                                |
| 82761681     | Published |               | 10/28/2011  |            | 13/284608          | US | Managing Security In A Network                                                                              |
| 82772023     | Granted   | 9032478       | 1/29/2009   | 5/12/2015  | 13/146112          | US | Loading A Plurality Of Appliances Into A Blade                                                              |
| 82772046     | Granted   | 8793479       | 1/29/2009   | 7/29/2014  | 13/145226          | US | COMPUTER RESOURCE UTILIZATION MODELING FOR<br>MULTIPLE<br>WORKLOADS                                         |
| 82774491     | Granted   | 8578023       | 7/29/2011   | 11/5/2013  | 13/194505          | US | Transaction Commitment and Replication in a Storage System                                                  |
| 82775035     | Published |               | 10/31/2011  |            | 13/285884          | US |                                                                                                             |

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| 82775043     | Granted   | 8773886       | 8/19/2011   | 7/8/2014   | 13/213412          | US | MEMORY ARRAY WITH CO-PLANAR WAVEGUIDE BASED MEMORY ELEMENT SELECTION                                                                             |
| 82775055     | Granted   | 8710865       | 10/26/2011  | 41758      | 13/281438          | US | Field-programmable analog array with memristors                                                                                                  |
| 82775144     | Granted   | 8880493       | 9/28/2011   | 41947      | 13/246947          | US | Multi-streams analytics                                                                                                                          |
| 82775152     | Published |               | 10/15/2011  |            | 13/274314          | US | MODIFIED FLOW GRAPH DEPICTION                                                                                                                    |
| 82775160     | Granted   | 8972308       | 10/31/2011  | 3/3/2015   | 13/284990          | US | Combining multivariate time-series prediction with motif discovery                                                                               |
| 82775164     | Granted   | 8896605       | 10/7/2011   | 11/25/2014 | 13/268050          | US | PROVIDING AN ELLIPSOID HAVING A CHARACTERISTIC BASED ON LOCAL CORRELATION OF ATTRIBUTES                                                          |
| 82775172     | Granted   | 8918358       | 10/15/2011  | 12/23/2014 | 13/274317          | US | INFORMATION INTEGRATION FLOW FRESHNESS COST                                                                                                      |
| 82775180     | Published |               | 10/15/2011  |            | 13/274316          | US | USER SELECTED FLOW GRAPH MODIFICATION                                                                                                            |
| 82775192     | Granted   | 9078629       | 9/19/2011   | 42199      | 13/235556          | US | Detecting Regime Change in Streaming Data                                                                                                        |
| 82775515     | Granted   | 8583655       | 10/17/2011  | 41590      | 13/274841          | US | USING AN INVERTED INDEX TO PRODUCE AN ANSWER TO A QUERY                                                                                          |
| 82775635     | Granted   | 8578111       | 10/11/2011  | 11/11/2013 | 13/270360          | US | BACKUP OPTIMIZATION                                                                                                                              |
| 82779992     | Granted   | 8473599       | 6/29/2011   | 41450      | 13/172354          | US | COMMUNICATION NETWORK LIST MANAGEMENT SENDING UPDATED MEMBER DATA FROM A PROVISIONING SYSTEM TO A LIST MANAGER AND THEN TO AN APPLICATION SERVER |
| 82781006     | Granted   | 8455852       | 1/26/2009   | 6/4/2013   | 13/142583          | US | CONTROLLED PLACEMENT OF DOPANTS IN MEMRISTOR ACTIVE REGIONS                                                                                      |
| 82781063     | Granted   | 8483996       | 6/30/2011   | 7/9/2013   | 13/173963          | US | Controlled Cooling Of A Data Center                                                                                                              |
| 82781069     | Granted   | 8507968       | 1/30/2009   | 8/13/2013  | 13/142581          | US | MEMRISTIVE TRANSISTOR MEMORY                                                                                                                     |
| 82781077     | Granted   | 8437172       | 1/30/2009   | 5/7/2013   | 13/142580          | US | Decoders Using Memristive Switches                                                                                                               |
| 82788276     | Published |               | 9/15/2011   |            | 13/233992          | US | GEOGRAPHICALLY PARTITIONED ONLINE SEARCH SYSTEM                                                                                                  |
| 82788288     | Published |               | 9/15/2011   |            | 13/233878          | US | GEOGRAPHICALLY PARTITIONED ONLINE CONTENT SERVICES                                                                                               |
| 82790060     | Granted   | 8781319       | 1/9/2009    | 41835      | 13/143905          | US | CONFIGURABLE POINT-TO-POINT OPTICAL COMMUNICATIONS SYSTEM BETWEEN SERVERS                                                                        |
| 82790122     | Published |               | 7/9/2011    |            | 13/179484          | US | AUTOMATED BUSINESS PROCESS MODEL DISCOVERY                                                                                                       |
| 82790818     | Granted   | 8732703       | 1/23/2009   | 5/20/2014  | 13/146119          | US | VERIFYING VIRTUAL MACHINES                                                                                                                       |
| 82795246     | Granted   | 8503396       | 8/4/2011    | 41492      | 13/198084          | US | Network Apparatus Enabling Roaming Across Subnets                                                                                                |
| 82795406     | Granted   | 8264795       | 7/15/2011   | 41163      | 13/183440          | US | Flexible Circuit For Use With A Magnetic Head                                                                                                    |
| 82799838     | Published |               | 9/21/2011   |            | 13/238430          | US | MATCHING OF CASES BASED ON ATTRIBUTES INCLUDING AN ATTRIBUTE RELATING TO FLOW OF ACTIVITIES                                                      |
| 82801048     | Published |               | 7/27/2011   |            | 13/191852          | US | TRANSMISSION OF CONFIGURATION TO A DEVICE FOR PROVISIONING IN A NETWORK                                                                          |
| 82801074     | Granted   | 8862577       | 8/15/2011   | 10/14/2014 | 13/209739          | US | Visualizing Sentiment Results with Visual Indicators Representing User Sentiment and Level of Uncertainty                                        |

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| 82802471     | Granted   | 8996805       | 10/26/2011  | 3/31/2015  | 13/282223          | US | SHARED CACHE MODULE AND METHOD THEREOF                                                                                 |
| 82811453     | Published |               | 1/29/2009   |            | 13/146934          | US | CONNECTING PORTS OF ONE OR MORE ELECTRONIC DEVICES TO DIFFERENT SUBSETS OF NETWORKS BASED ON DIFFERENT OPERATING MODES |
| 82816014     | Granted   | D686624       | 10/21/2011  | 4/14/78    | 29/404536          | US | LATCH FOR A SERVER                                                                                                     |
| 82816019     | Granted   | D670294       | 10/21/2011  | 11/6/2012  | 29/404542          | US | DOOR FOR COMPUTER RACK CABINET                                                                                         |
| 82816048     | Granted   | 9141914       | 10/31/2011  | 9/22/2015  | 13/286150          | US | SYSTEM AND METHOD FOR RANKING ANOMALIES                                                                                |
| 82816571     | Granted   | 8879616       | 10/31/2011  | 11/4/2014  | 13/285195          | US | RECEIVER WITH DECISION FEEDBACK EQUALIZER                                                                              |
| 82816583     | Granted   | 9077663       | 8/12/2011   | 42192      | 13/209176          | US | Router Aggregation                                                                                                     |
| 82816660     | Published |               | 2/23/2009   |            | 13/148582          | US | Social Networking Of Mobile Devices                                                                                    |
| 82817345     | Granted   | 8275669       | 8/4/2011    | 9/25/2012  | 13/197993          | US | AUCTION METHOD AND APPARATUS                                                                                           |
| 82817467     | Granted   | 8798078       | 3/13/2009   | 8/5/2014   | 13/147792          | US | A PLURALITY OF SENSORS COUPLED TO A SERIES OF SWITCHING DEVICES                                                        |
| 82818876     | Granted   | 8738657       | 9/27/2011   | 41786      | 13/246715          | US | DISTRIBUTION OF KEY VALUES                                                                                             |
| 82818908     | Published |               | 10/24/2011  |            | 13/280031          | US | Performing Sentiment Analysis                                                                                          |
| 82819014     | Granted   | 8732508       | 3/31/2009   | 5/20/2014  | 13/254144          | US | DETERMINING POWER TOPOLOGY OF A PLURALITY OF COMPUTER SYSTEMS                                                          |
| 82819631     | Granted   | 8719201       | 10/7/2011   | 5/6/2014   | 13/269470          | US | Making a Recommendation to a User That is Currently Generating Events Based on a Subset of Historical Event Data       |
| 82821369     | Published |               | 6/1/2009    |            | 13/375125          | US | System And Method For Collecting Application Performance Data                                                          |
| 82821655     | Granted   | 8432892       | 8/23/2011   | 4/30/2013  | 13/215937          | US | Method and System for WLAN Synchronization                                                                             |
| 82821664     | Granted   | D678273       | 10/25/2011  | 3/19/2013  | 29/404733          | US | Hard Drive Carrier                                                                                                     |
| 82827698     | Granted   | 8656195       | 8/30/2011   | 2/18/2014  | 13/221840          | US | ENERGY EFFICIENT ETHERNET CONTROL.                                                                                     |
| 82828050     | Published |               | 10/28/2011  |            | 13/283940          | US | POWER SUPPLIES WITH LAGGING POWER-FACTOR                                                                               |
| 82828079     | Granted   | 9015516       | 2/29/2012   | 4/21/2015  | 13/407845          | US | STORING EVENT DATA AND A TIME VALUE IN MEMORY WITH AN EVENT LOGGING MODULE                                             |
| 82829630     | Granted   | 8272520       | 9/12/2011   | 9/25/2012  | 13/230765          | US | Standalone Open Frame                                                                                                  |
| 82829676     | Granted   | 8725005       | 2/23/2009   | 5/13/2014  | 13/202940          | US | DYNAMIC IMPEDANCE PHOTODETECTOR RECEIVER CIRCUIT                                                                       |
| 82832430     | Published |               | 8/26/2011   |            | 13/219485          | US | PROCESS REFINEMENT                                                                                                     |
| 82832501     | Granted   | 8793538       | 1/30/2012   | 41849      | 13/361102          | US | SYSTEM ERROR RESPONSE                                                                                                  |
| 82833005     | Granted   | 8984606       | 12/22/2011  | 42080      | 13/335035          | US | RE-AUTHENTICATION                                                                                                      |
| 82833735     | Granted   | 8886679       | 10/11/2011  | 11/11/2014 | 13/271036          | US | Mining Web Applications                                                                                                |
| 82833764     | Allowed   |               | 2/27/2012   |            | 13/406099          | US | USE AND STATE BASED POWER MANAGEMENT (as amended)                                                                      |
| 82833778     | Published |               | 4/12/2012   |            | 13/445691          | US | ESTIMATING A METRIC RELATED TO A SERVICE DEMAND USING A DEFINED FRAMEWORK                                              |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------|
| 82833792     | Published |               | 4/30/2012   |            | 13/460572          | US | Defining an Overall Sustainability Metric for Services based on User Inputs |
| 82833807     | Published |               | 1/31/2012   |            | 13/362942          | US | REAL-TIME SERVER MANAGEMENT                                                 |
| 82833858     | Published |               | 10/26/2011  |            | 13/282399          | US | SPOT PRICING TO REDUCE WORKLOAD IN A DATA CENTER                            |
| 82835644     | Granted   | 8611133       | 1/9/2012    | 41625      | 13/346219          | US | STATEFUL NEGATIVE DIFFERENTIAL RESISTANCE DEVICES                           |
| 82836740     | Granted   | 8687983       | 11/2/2011   | 4/1/2014   | 13/287555          | US | LASER COMMUNICATION SYSTEM                                                  |
| 82836832     | Granted   | 8671091       | 8/2/2006    | 3/11/2014  | 11/461937          | US | QUERY OPTIMIZER                                                             |
| 82836843     | Granted   | 8214352       | 11/24/2009  | 41093      | 12/625482          | US | MODULAR QUERY OPTIMIZER                                                     |
| 82836860     | Granted   | 8290931       | 6/16/2010   | 10/16/2012 | 12/816770          | US | DATABASE DESIGNER                                                           |
| 82836864     | Published |               | 6/7/2011    |            | 13/155232          | US | SIDEWAYS INFORMATION PASSING                                                |
| 82837107     | Published |               | 1/17/2012   |            | 13/351660          | US | DELIVERING AN ITEM OF INTEREST                                              |
| 82837112     | Published |               | 2/27/2012   |            | 13/406478          | US | Methods and Systems for Processing Data Arrays Using Bloom Filters          |
| 82837187     | Published |               | 9/23/2011   |            | 13/243369          | US | INTELLIGENT AIR MOVER APPARATUS                                             |
| 82837256     | Granted   | 8826398       | 9/29/2011   | 41884      | 13/248494          | US | PASSWORD CHANGING                                                           |
| 82837273     | Granted   | 8390323       | 4/30/2009   | 3/5/2013   | 13/256234          | US | DENSE NANOSCALE LOGIC CIRCUITRY                                             |
| 82837281     | Granted   | 8935260       | 5/12/2009   | 1/13/2015  | 13/264806          | US | Document Key Phrase Extraction Method                                       |
| 82837287     | Granted   | 8605488       | 6/12/2009   | 12/10/2013 | 13/256239          | US | CAPACITIVE CROSSBAR ARRAYS                                                  |
| 82837290     | Granted   | 8885422       | 6/12/2009   | 41954      | 13/256242          | US | HIERARCHICAL ON-CHIP MEMORY                                                 |
| 82837299     | Granted   | 8750024       | 6/18/2009   | 6/10/2014  | 13/256245          | US | MEMCAPACITOR                                                                |
| 82837359     | Granted   | 8437072       | 6/30/2009   | 5/7/2013   | 13/256256          | US | INDIVIDUALLY ADDRESSABLE NANO-SCALE MECHANICAL ACTUATORS                    |
| 82838094     | Granted   | 9148348       | 10/31/2011  | 42276      | 13/285842          | US | Generating Network Topologies                                               |
| 82842024     | Granted   | 9053319       | 9/29/2011   | 6/9/2015   | 13/248981          | US | CONTEXT-SENSITIVE TAINT PROCESSING FOR APPLICATION SECURITY                 |
| 82843020     | Granted   | 8739026       | 10/23/2011  | 5/27/2014  | 13/279283          | US | MARKUP LANGUAGE SCHEMA ERROR CORRECTION                                     |
| 82844169     | Granted   | 8471270       | 3/23/2009   | 6/25/2013  | 13/257393          | US | INDIRECT-BANDGAP-SEMICONDUCTOR, LIGHT-EMITTING DIODE                        |
| 82844217     | Granted   | 8650302       | 9/14/2011   | 41681      | 13/232379          | US | Communication In Multiprocessor Using Proxy Sockets                         |
| 82844228     | Granted   | 8599557       | 4/29/2009   | 12/3/2013  | 13/258521          | US | Printed Circuit Board Cooling Assembly                                      |
| 82846309     | Granted   | 8635484       | 3/18/2009   | 1/21/2014  | 13/256278          | US | EVENT BASED CORRELATION OF POWER EVENTS                                     |
| 82846416     | Granted   | 8780471       | 10/27/2011  | 7/15/2014  | 13/283359          | US | Linking Errors to Particular Tapes or Particular Tape Drives                |
| 82846968     | Granted   | D673161       | 10/13/2011  | 41268      | 29/404003          | US | A Perforation Pattern for A Cover Plate for A Computing Device              |
| 82847452     | Granted   | 8732381       | 11/9/2011   | 5/20/2014  | 13/292882          | US | SAS EXPANDER FOR COMMUNICATION BETWEEN DRIVERS                              |
| 82847475     | Published |               | 12/22/2011  |            | 13/335861          | US | SERVICE PROVIDER SELECTION                                                  |
| 82848213     | Granted   | 8689044       | 11/16/2011  | 4/1/2014   | 13/298099          | US | SAS HOST CONTROLLER CACHE TRACKING                                          |
| 82848374     | Granted   | 8755612       | 12/15/2011  | 41807      | 13/327393          | US | IDENTIFYING TRUNCATED CHARACTER STRINGS                                     |
| 82848431     | Published |               | 3/20/2012   |            | 13/424844          | US | AUTOMATED CONFIGURATION CHANGE AUTHORIZATION                                |

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| 82849057     | Granted   | 8645610       | 6/29/2009   | 41674      | 13/257271          | US | Organizing And Managing A Memory Blade With Super And Buffers                                                                  |
| 82850126     | Granted   | 8799192       | 2/28/2012   | 41856      | 13/406843          | US | Deriving a Nested Chain of Densest Subgraphs from a Graph                                                                      |
| 82850134     | Published |               | 4/30/2012   |            | 13/460167          | US | Mapping Long Names in a Filesystem                                                                                             |
| 82850142     | Published |               | 5/11/2012   |            | 13/469641          | US | JOIN ORDER RESTRICTIONS                                                                                                        |
| 82850157     | Published |               | 12/23/2011  |            | 13/336170          | US | Segregating Storage by Virtual Segment to Efficiently Rebalance Data Across a Large Scale, Distributed Database Cluster        |
| 82850160     | Granted   | 8805811       | 4/30/2012   | 8/12/2014  | 13/459760          | US | EXECUTING USER-DEFINED FUNCTION ON A PLURALITY OF DATABASE TUPLES                                                              |
| 82850163     | Granted   | 9116947       | 3/15/2012   | 8/25/2015  | 13/421761          | US | Data-Record Pattern Searching                                                                                                  |
| 82850166     | Published |               | 2/9/2012    |            | 13/369990          | US | ASSESSING COMPRESSED-DATABASE RAW SIZE                                                                                         |
| 82850174     | Granted   | 8887160       | 11/21/2011  | 11/11/2014 | 13/301301          | US | Mapping Tasks to Execution Threads                                                                                             |
| 82850182     | Granted   | 8538954       | 2/1/2012    | 41534      | 13/364155          | US | AGGREGATE FUNCTION PARTITIONS FOR DISTRIBUTED PROCESSING                                                                       |
| 82850186     | Granted   | 8732720       | 12/22/2011  | 41779      | 13/335847          | US | Job Scheduling Based On Map Stage And Reduce Stage Duration                                                                    |
| 82850194     | Granted   | 8983979       | 1/13/2012   | 42080      | 13/349996          | US | CONTROLLING ACCESS TO STORED INFORMATION                                                                                       |
| 82850202     | Granted   | 8638981       | 2/1/2012    | 41667      | 13/363597          | US | PLACING TEMPORALLY ALIGNED AND VARIABLY SIZED PIXELS IN DISCRETE RINGS IN A GRAPHICAL VISUALIZATION                            |
| 82850206     | Published |               | 2/1/2012    |            | 13/363602          | US | PLACING PIXELS ACCORDING TO ATTRIBUTE VALUES IN POSITIONS IN A GRAPHICAL VISUALIZATION THAT CORRESPOND TO GEOGRAPHIC LOCATIONS |
| 82850222     | Granted   | 8949264       | 1/30/2012   | 2/3/2015   | 13/361326          | US | DISAMBIGUATING ASSOCIATIONS                                                                                                    |
| 82850245     | Granted   | 8711693       | 2/21/2012   | 4/29/2014  | 13/401111          | US | Gateway Channel Utilization                                                                                                    |
| 82850249     | Published |               | 12/20/2011  |            | 13/331815          | US | APPLICATION SECURITY TESTING                                                                                                   |
| 82850417     | Granted   | 8844015       | 1/31/2012   | 9/23/2014  | 13/362290          | US | APPLICATION-ACCESS AUTHENTICATION AGENT                                                                                        |
| 82850426     | Published |               | 12/20/2011  |            | 13/331777          | US | APPLICATION SECURITY TESTING                                                                                                   |
| 82851196     | Granted   | 8983676       | 9/25/2011   | 3/17/2015  | 13/244516          | US | SYSTEM FOR COOLING A HEAT-GENERATING DEVICE (as amended)                                                                       |
| 82852160     | Granted   | 8601463       | 12/1/2009   | 12/3/2013  | 13/258380          | US | Firmware Management                                                                                                            |
| 82852232     | Granted   | 8664605       | 4/28/2009   | 3/4/2014   | 13/258424          | US | COVERT LABEL STRUCTURE                                                                                                         |
| 82852246     | Granted   | 9094317       | 6/18/2009   | 7/28/2015  | 13/258903          | US | PROCESSOR TOPOLOGY SWITCHES                                                                                                    |
| 82852261     | Granted   | 8799700       | 7/31/2009   | 8/5/2014   | 13/379276          | US | PROVIDING FAULT-TOLERANT SPREAD SPECTRUM CLOCK SIGNALS IN A SYSTEM                                                             |
| 82852266     | Granted   | 8793481       | 12/10/2009  | 7/29/2014  | 13/258400          | US | Managing Hardware Resources For Soft Partitioning                                                                              |
| 82852330     | Granted   | 8625280       | 10/30/2009  | 1/7/2014   | 13/260066          | US | COOLING MEMORY MODULES USING COLD PLATE BLADES COUPLED TO THE MEMORY MODULES VIA CLIPS                                         |

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| 82852332     | Granted   | 8843815       | 1/18/2010   | 9/23/2014  | 13/258484          | US | System And Method For Automatically Extracting Metadata From Unstructured Electronic Documents                                                      |
| 82852406     | Published |               | 7/31/2009   |            | 13/382247          | US | Compression Of XML Data                                                                                                                             |
| 82852868     | Granted   | 8959205       | 7/31/2009   | 2/17/2015  | 13/384671          | US | Method And System To Recognize And Inventory Applications                                                                                           |
| 82852890     | Granted   | 8763005       | 7/24/2009   | 6/24/2014  | 13/259590          | US | Virtual-machine-based Application-service Provision Of End Versions Of Back-End Applications (as amended)                                           |
| 82852930     | Published |               | 7/2/2009    |            | 13/379161          | US | METHOD AND APPARATUS FOR SUPPORTING A COMPUTER-BASED PRODUCT                                                                                        |
| 82852934     | Granted   | 8692683       | 8/9/2009    | 4/8/2014   | 13/258548          | US | Illuminable Indicator Of Electronic Device Being Enabled Based At Least On User Presence                                                            |
| 82853005     | Published |               | 10/15/2009  |            | 13/258970          | US | Information Technology System Change Planning                                                                                                       |
| 82853019     | Allowed   |               | 10/15/2009  |            | 13/259498          | US | HETEROGENEOUS DATA SOURCE MANAGEMENT                                                                                                                |
| 82853022     | Granted   | 8575585       | 7/13/2009   | 11/5/2013  | 13/382281          | US | MEMRISTIVE DEVICE                                                                                                                                   |
| 82853030     | Granted   | 8661283       | 3/25/2009   | 2/25/2014  | 13/259118          | US | POWER DISTRIBUTION UNIT-DEVICE CORRELATION                                                                                                          |
| 82853097     | Granted   | 8779848       | 8/28/2009   | 41835      | 13/383981          | US | TWO TERMINAL MEMCAPACITOR DEVICE                                                                                                                    |
| 82853099     | Published |               | 10/6/2009   |            | 13/260127          | US | Icons With Subparts Presenting Information About A System                                                                                           |
| 82853122     | Granted   | 8787176       | 10/29/2009  | 41842      | 13/259551          | US | SWITCH THAT MONITORS FOR FINGERPRINTED PACKETS                                                                                                      |
| 82853145     | Granted   | 9036991       | 10/30/2009  | 5/19/2015  | 13/259833          | US | TRANSMITTER AND RECEIVER ARRANGEMENTS FOR TESTING AN OPTICAL FIBER                                                                                  |
| 82853154     | Granted   | 9032517       | 10/31/2009  | 5/12/2015  | 13/259307          | US | MALICIOUS CODE DETECTION                                                                                                                            |
| 82853162     | Granted   | 8745357       | 11/30/2009  | 41793      | 13/259593          | US | REMAPING FOR MEMORY WEAR LEVELING                                                                                                                   |
| 82853237     | Granted   | 8546898       | 10/29/2009  | 10/1/2013  | 13/259196          | US | OPTOELECTRONIC LIGHT EXPOSURE MEMORY                                                                                                                |
| 82853239     | Published |               | 1/29/2010   |            | 13/259857          | US | MULTIMODE VERTICAL-CAVITY SURFACE-EMITTING LASER ARRAYS                                                                                             |
| 82853248     | Published |               | 1/29/2010   |            | 13/259402          | US | NON-PERIODIC GRATINGS FOR SHAPING REFLECTED AND TRANSMITTED LIGHT IRRADIANCE PROFILES                                                               |
| 82853254     | Granted   | 8952403       | 1/29/2010   | 2/10/2015  | 13/259886          | US | OPTICAL DEVICES BASED ON NON-PERIODIC SUB-WAVELENGTH GRATINGS                                                                                       |
| 82853260     | Published |               | 10/30/2009  |            | 13/259202          | US | HARD DISK DRIVE HAVING REGIONS CORRESPONDING TO DIFFERENT SPEEDS AT WHICH STORAGE SURFACE ROTATES                                                   |
| 82853262     | Granted   | 8537634       | 11/13/2009  | 41534      | 13/259128          | US | PARALLELIZED CHECK POINTING USING Mats AND THROUGH SILICON Vias (tsvs)                                                                              |
| 82853266     | Published |               | 10/31/2009  |            | 13/259216          | US | Determining Probability Than An Object Belongs To A Topic Using Sample Items Selected From Object And Probability Distribution Profile Of The Topic |
| 82853801     | Granted   | 8225341       | 9/30/2011   | 7/17/2012  | 13/250724          | US | Data Storage Means                                                                                                                                  |

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| 82853812     | Published |               | 9/14/2010   |            | 13/260293          | US | Automatic Selection Of Agent-based Or Agentless Monitoring                                           |
| 82853898     | Published |               | 2/23/2010   |            | 13/260261          | US | SIMULATING SUPPLY AND DEMAND REALIZATION IN WORKFORCE PLAN EVALUATION                                |
| 82853904     | Published |               | 2/26/2010   |            | 13/260258          | US | ELICITING CUSTOMER PREFERENCE FROM PURCHASING BEHAVIOR SURVEYS                                       |
| 82853946     | Granted   | 8667235       | 2/11/2010   | 3/4/2014   | 13/259739          | US | DATA DE-DUPLICATION FOR SERIAL-ACCESS STORAGE MEDIA                                                  |
| 82853976     | Granted   | 8774638       | 7/31/2009   | 7/8/2014   | 13/260095          | US | PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS                                               |
| 82854047     | Granted   | 8917616       | 10/28/2009  | 12/23/2014 | 13/260162          | US | METHODS AND APPARATUS FOR DETECTION OF A NAT DEVICE                                                  |
| 82854053     | Granted   | 9037876       | 1/31/2010   | 5/19/2015  | 13/260175          | US | METHOD FOR MITIGATING FALSE POWERED DEVICE DETECTION                                                 |
| 82854055     | Granted   | 8751642       | 1/31/2010   | 6/10/2014  | 13/260181          | US | METHOD AND SYSTEM FOR MANAGEMENT OF SAMPLED TRAFFIC DATA                                             |
| 82855510     | Granted   | 8649167       | 6/19/2009   | 2/11/2014  | 13/320607          | US | Pivoting Mounts For Media Drives                                                                     |
| 82856223     | Granted   | 8345372       | 1/9/2012    | 1/1/2013   | 13/346058          | US | MEDIUM FOR USE IN A TAPE DRIVE APPARATUS                                                             |
| 82856365     | Granted   | 8706101       | 6/1/2010    | 4/22/2014  | 13/375881          | US | METHOD AND APPARATUS FOR ASSOCIATING A SUBSCRIBER DIRECTORY IDENTIFIER TO A SUBSCRIBER IDENTIFIER    |
|              |           |               |             |            |                    |    |                                                                                                      |
| 82858610     | Published |               | 4/30/2012   |            | 13/459523          | US | MEMORY ACCESS UNLOCK                                                                                 |
| 82859749     | Granted   | 8665704       | 11/25/2011  | 3/4/2014   | 13/304463          | US | Parallely Coupled Stackable Network Switching Device                                                 |
| 82859772     | Granted   | 8817491       | 4/27/2009   | 8/26/2014  | 13/263658          | US | Electric Power Conversion System Having An Adaptable Transformer Turns Ratio For Improved Efficiency |
|              |           |               |             |            |                    |    |                                                                                                      |
| 82859781     | Published |               | 4/29/2012   |            | 13/459199          | US | Forward Counter Block                                                                                |
| 82859794     | Granted   | 8645726       | 4/30/2009   | 2/4/2014   | 13/263693          | US | Method And System For Load Sharing In A Multiple Power Supply System                                 |
| 82861999     | Granted   | 8682846       | 10/24/2011  | 41723      | 13/279335          | US | CONTENT ITEM RECONCILIATION                                                                          |
| 82862591     | Published |               | 11/4/2011   |            | 13/289747          | US | PROJECT COMPLIANCE ASSESSMENT                                                                        |
| 82864729     | Granted   | 8730627       | 6/8/2009    | 5/20/2014  | 13/263942          | US | DECREASING VOLTAGE DETECTION WITH CONTROL SIGNALING                                                  |
| 828668328    | Published |               | 11/3/2011   |            | 13/288488          | US | Method and System for Providing Community Networking Services in an Organization                     |
| 82871734     | Published |               | 2/9/2012    |            | 13/370018          | US | Storage Configuration Discovery                                                                      |
| 82881395     | Granted   | 8595528       | 11/8/2011   | 41604      | 13/291301          | US | System And Method For Implementing An Integrated Circuit Having A Dynamically Variable Power Limit   |
| 82882010     | Published |               | 3/8/2012    |            | 13/414962          | US | Systems and Methods for Service Delivery of Automatic Service Level Agreements                       |
| 82884043     | Granted   | 8582287       | 6/19/2009   | 11/12/2013 | 13/320736          | US | Drive Carrier With Pivoting Handle                                                                   |

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| 82884500     | Granted   | 8661456       | 6/1/2011    | 2/25/2014  | 13/285939          | US | Extendable Service Oriented Event Correlation Open Platform Architecture                                                                                                  |
| 82892261     | Granted   | 8626429       | 2/15/2012   | 1/7/2014   | 13/397280          | US | Allocation of Flight Legs to Dispatcher Positions                                                                                                                         |
| 82892275     | Published |               | 3/8/2012    |            | 13/415803          | US | INTERPRETING REQUESTS AND PROVIDING RESPONSES THE CONTEXT OF A PROCESS                                                                                                    |
| 82893480     | Granted   | 8863122       | 7/31/2009   | 41926      | 13/383506          | US | REMOTE CONTROL OF A PLURALITY OF VIRTUAL MACHINES USING ACTIONS FACILITATED THROUGH A GRAPHIC USER INTERFACE (AS AMENDED)                                                 |
| 82894965     | Granted   | 8331364       | 11/21/2011  | 41254      | 13/301088          | US | HIGHLY FLEXIBLE AND EFFICIENT MAC TO PHY INTERFACES                                                                                                                       |
| 82894971     | Granted   | 8738995       | 9/10/2009   | 5/27/2014  | 13/384678          | US | Memory Subsystem Having A First Portion To Store Data With Error Correction Code Information And A Second Portion To Store Data Without Error Correction Code Information |
| 82895034     | Published |               | 8/11/2009   |            | 13/384666          | US | Enclosure Airflow Controller                                                                                                                                              |
| 82895043     | Granted   | 8838907       | 10/7/2009   | 9/16/2014  | 13/384700          | US | Notification Protocol Based Endpoint Caching Of Host Memory                                                                                                               |
| 82899663     | Published |               | 2/28/2012   |            | 13/407125          | US | DISTRIBUTION TREES WITH STAGES                                                                                                                                            |
| 82899677     | Granted   | 9087052       | 4/30/2012   | 7/21/2015  | 13/459256          | US | BATCH DBMS STATEMENT PROCESSING SUCH THAT INTERMEDIATE FEEDBACK IS PROVIDED PRIOR TO COMPLETION OF PROCESSING                                                             |
| 82899689     | Published |               | 3/30/2012   |            | 13/435106          | US | INDICATORS FOR STORAGE CELLS                                                                                                                                              |
| 82899712     | Published |               | 9/27/2012   |            | 13/628886          | US | SESSION KEY ASSOCIATED WITH COMMUNICATION PATH                                                                                                                            |
| 82899734     | Granted   | 8737007       | 3/28/2012   | 41786      | 13/432130          | US | REDUCTION OF DEGRADATION OF MAGNETIC TAPE APPARATUS                                                                                                                       |
| 82900158     | Granted   | 9008954       | 4/30/2012   | 4/14/2015  | 13/460230          | US | PREDICTING IMPACT OF A TRAFFIC INCIDENT ON A ROAD NETWORK                                                                                                                 |
| 82900189     | Allowed   |               | 5/31/2012   |            | 13/485730          | US | GENERATION OF EXPLANATORY SUMMARIES                                                                                                                                       |
| 82900193     | Granted   | 8688728       | 2/27/2012   | 4/1/2014   | 13/406090          | US | SYSTEM AND METHOD OF SEARCHING A CORPUS                                                                                                                                   |
| 82900213     | Published |               | 3/30/2012   |            | 13/434938          | US | ENCRYPTED PAYMENT IMAGE                                                                                                                                                   |
| 82900564     | Published |               | 2/21/2012   |            | 13/400673          | US | DETERMINATION OF EXPERTISE AUTHORITY                                                                                                                                      |
| 82900633     | Granted   | 8918660       | 2/28/2012   | 12/23/2014 | 13/406593          | US | POWER SOURCING NETWORK PORT RESET                                                                                                                                         |
| 82900690     | Published |               | 3/26/2012   |            | 13/429741          | US | INTENTION STATEMENT VISUALIZATION                                                                                                                                         |
| 82900694     | Granted   | 9064009       | 3/28/2012   | 6/23/2015  | 13/432639          | US | ATTRIBUTE CLOUD                                                                                                                                                           |
| 82900788     | Granted   | 9081818       | 3/13/2012   | 42199      | 13/418405          | US | SAS FABRIC DISCOVERY                                                                                                                                                      |
| 82900919     | Published |               | 9/20/2012   |            | 13/623335          | US | DATA PACKET STREAM FINGERPRINT                                                                                                                                            |
| 82901638     | Granted   | 8654473       | 1/12/2012   | 2/18/2014  | 13/348802          | US | TAPE HEAD LENGTH ADJUSTMENT                                                                                                                                               |
| 82901661     | Granted   | 9098325       | 2/28/2012   | 42220      | 13/407050          | US | PERSISTENT VOLUME AT AN OFFSET OF A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER                                                                                              |
| 82901684     | Published |               | 5/31/2012   |            | 13/484895          | US | Calculating A Misconduct Prediction Value                                                                                                                                 |
| 82901999     | Published |               | 6/12/2012   |            | 13/494761          | US | Hybrid Memory Module                                                                                                                                                      |



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| 82902027     | Granted   | 8822275       | 4/30/2012   | 41884      | 13/459924          | US | COMPOSITE WAFER INCLUDING A MOLDED WAFER AND A SECOND WAFER                               |
| 82903375     | Granted   | 8995271       | 4/30/2012   | 3/31/2015  | 13/459949          | US | COMMUNICATIONS FLOW ANALYSIS                                                              |
| 82904455     | Published |               | 5/29/2012   |            | 13/482533          | US | SERVER MANAGEMENT CONNECTIONS                                                             |
| 82904463     | Published |               | 2/29/2012   |            | 13/408544          | US | MIGRATION OF PROFILES BETWEEN VIRTUAL CONNECT DOMAINS                                     |
| 82904478     | Published |               | 1/27/2012   |            | 13/360076          | US | METHOD AND SYSTEM FOR OPTIMUM ROUTING                                                     |
| 82910274     | Allowed   |               | 6/10/2010   |            | 13/382105          | US | Data Center Cooler with Chiller and Cooling Tower (as amended)                            |
| 82911239     | Published |               | 4/30/2012   |            | 13/459264          | US | SERVICE PROVIDER-HOSTED VIRTUAL MACHINE INSTANTIATION BY HOSTER USER FOR USE BY END USERS |
| 82911256     | Granted   | 8990646       | 5/31/2012   | 3/24/2015  | 13/485824          | US | MEMORY ERROR TEST ROUTINE                                                                 |
| 82911822     | Published |               | 4/30/2012   |            | 13/459917          | US | FEED-FORWARD ARBITRATION                                                                  |
| 82911826     | Published |               | 3/19/2012   |            | 13/423916          | US | COOLING AN ELECTRONIC ASSEMBLY USING POSITION VARIABLE FLOW RESTRICTORS                   |
| 82911834     | Granted   | 8665936       | 2/15/2012   | 3/4/2014   | 13/397158          | US | DESIGN OF EXPERIMENTS TRANSMITTER TRAINING SYSTEMS AND METHOD                             |
| 82913148     | Granted   | 8656200       | 12/29/2011  | 2/18/2014  | 13/340311          | US | System For Reducing Power Consumption In An Electronic Chip                               |
| 82914270     | Granted   | 9037551       | 3/7/2012    | 5/19/2015  | 13/413818          | US | REDUNDANT ATTRIBUTE VALUES                                                                |
| 82914685     | Granted   | 8665559       | 3/19/2012   | 41702      | 13/423761          | US | MAGNETIC HEAD                                                                             |
| 82915504     | Granted   | 8775414       | 4/16/2012   | 7/8/2014   | 13/447737          | US | System And Method For Executing Queries                                                   |
| 82916233     | Published |               | 2/24/2012   |            | 13/404619          | US | ACTIVE NON-VOLATILE MEMORY POST-PROCESSING                                                |
| 82916237     | Published |               | 4/30/2012   |            | 13/459970          | US | Distributed Active Data Storage System                                                    |
| 82916253     | Published |               | 3/26/2012   |            | 13/430673          | US | REDUCING CABLING COSTS IN A DATACENTER NETWORK                                            |
| 82916257     | Granted   | 8938599       | 3/15/2012   | 42024      | 13/421651          | US | Distributed Graph Storage System                                                          |
| 82916265     | Granted   | 8966204       | 2/29/2012   | 2/24/2015  | 13/408276          | US | Data Migration between Memory Locations                                                   |
| 82916273     | Published |               | 11/30/2012  |            | 13/690426          | US | RATE LIMIT MANAGERS TO ASSIGN NETWORK TRAFFIC FLOWS                                       |
| 82916296     | Granted   | 8813042       | 4/6/2012    | 41870      | 13/441656          | US | Identifying Globally Consistent States in a Multithreaded Program                         |
| 82916308     | Published |               | 4/30/2012   |            | 13/460344          | US | USING A CACHE IN A DISAGGREGATED MEMORY ARCHITECTURE                                      |
| 82918884     | Published |               | 1/13/2012   |            | 13/350485          | US | Controlling Access To Communication Services                                              |
| 82919274     | Published |               | 6/15/2010   |            | 13/384136          | US | Method And System For Verifying Data Accuracy                                             |
| 82919402     | Granted   | 8365292       | 1/17/2012   | 1/29/2013  | 13/352088          | US | Methods And Systems For Managing A Potential Security Threat To A Network                 |
| 82922672     | Published |               | 4/30/2012   |            | 13/460591          | US | ANTENNA                                                                                   |
| 82922683     | Granted   | 8569900       | 7/20/2009   | 10/29/2013 | 13/383183          | US | MANOWIRE SENSOR WITH ANGLED SEGMENTS THAT ARE DIFFERENTLY FUNCTIONALIZED                  |

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| 82923475     | Published |               | 7/8/2010    |            | 13/383594          | US | Resource Assignment For Jobs In A System Having A Processing Pipeline                                                   |
| 82923487     | Granted   | 8750062       | 7/30/2010   | 41800      | 13/383602          | US | MEMORY ELEMENT AND METHOD FOR DETERMINING THE DATA STATE OF A MEMORY ELEMENT                                            |
| 82924163     | Granted   | 8705265       | 4/30/2010   | 4/22/2014  | 13/383614          | US | IONIC DEVICES CONTAINING A MEMBRANE BETWEEN LAYERS                                                                      |
| 82924165     | Granted   | 8735858       | 4/30/2010   | 5/27/2014  | 13/383616          | US | IONIC DEVICES WITH INTERACTING SPECIES                                                                                  |
| 82924182     | Published |               | 1/29/2010   |            | 13/383634          | US | MEMRISTOR WITH CONTROLLED ELECTRODE GRAIN SIZE                                                                          |
| 82924186     | Granted   | 8530873       | 1/29/2010   | 41527      | 13/383994          | US | ELECTROFORMING FREE MEMRISTOR AND METHOD FOR FABRICATING THEREOF (as amended)                                           |
| 82924188     | Granted   | 8904092       | 2/10/2010   | 12/2/2014  | 13/383641          | US | IDENTIFYING A LOCATION CONTAINING INVALID DATA IN A STORAGE MEDIA                                                       |
| 82924272     | Published |               | 2/1/2010    |            | 13/384977          | US | Deep Sleep Mode Management For A Network Switch                                                                         |
| 82925145     | Published |               | 10/29/2009  |            | 13/384931          | US | NETWORK SWITCH CONNECTED TO A SENSOR                                                                                    |
| 82925886     | Granted   | 8564867       | 12/10/2009  | 41569      | 13/386382          | US | Fair Token Arbitration Systems And Methods                                                                              |
| 82926132     | Published |               | 11/23/2009  |            | 13/384838          | US | System And Method For Object Relationship Identification In A User Interface                                            |
| 82929144     | Published |               | 3/13/2010   |            | 13/386402          | US | SELECTING SUPPLIERS TO PERFORM SERVICES FOR AN ENTERPRISE                                                               |
| 82929158     | Published |               | 3/30/2012   |            | 13/436541          | US | ANALYZING SOCIAL MEDIA                                                                                                  |
| 82929166     | Published |               | 9/6/2012    |            | 13/605665          | US | Computer Cluster with Objectives-Based Resource Sharing                                                                 |
| 82929186     | Published |               | 4/24/2012   |            | 13/454693          | US | Query Engine Communication                                                                                              |
| 82929204     | Granted   | 8972415       | 4/30/2012   | 42066      | 13/460015          | US | Similarity Search Initialization                                                                                        |
| 82929212     | Published |               | 4/9/2012    |            | 13/442358          | US | DETERMINING AN ALLOCATION OF RESOURCES TO ASSIGN TO JOBS OF A PROGRAM                                                   |
| 82930243     | Published |               | 9/23/2009   |            | 13/386053          | US | PROVIDING IN RUSH CURRENT TOLERANCE TO AN ELECTRONIC DEVICE                                                             |
| 82930446     | Granted   | 8879300       | 4/22/2010   | 11/4/2014  | 13/384853          | US | SWITCHABLE TWO-TERMINAL DEVICES WITH DIFFUSION/DRIFT SPECIES                                                            |
| 82930514     | Granted   | 9052463       | 6/22/2010   | 6/9/2015   | 13/384861          | US | COUPLING OF A LASER SOURCE TO AN OPTICAL DATA DISTRIBUTING DEVICE                                                       |
| 82930554     | Granted   | 8681579       | 4/30/2010   | 3/25/2014  | 13/384885          | US | PROGRAMMABLE CURRENT-LIMITED VOLTAGE BUFFER, INTEGRATED-CIRCUIT DEVICE AND METHOD FOR CURRENT-LIMITING A MEMORY ELEMENT |
| 82931175     | Published |               | 3/10/2010   |            | 13/384837          | US | Data Protection                                                                                                         |
| 82931425     | Granted   | 8781276       | 1/29/2010   | 41835      | 13/387025          | US | GRATING-BASED OPTICAL FIBER-TO-WAVEGUIDE INTERCONNECTS                                                                  |
| 82931436     | Granted   | 9093819       | 1/29/2010   | 42213      | 13/387030          | US | VERTICAL-CAVITY SURFACE-EMITTING LASERS WITH NON-PERIODIC GRATINGS                                                      |

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| 82932592     | Granted   | 8521918       | 11/10/2009  | 8/27/2013  | 13/386608          | US | Selectively Hiding An Interface Controller From An Operating System                                                                        |
| 82933778     | Allowed   |               | 1/28/2010   |            | 13/386573          | US | TEACHING A NETWORK DEVICE USING UNSOLICITED TEACHING MESSAGES                                                                              |
| 82934041     | Published |               | 10/26/2009  |            | 13/386436          | US | SPARSE INDEX BIDDING AND AUCTION BASED STORAGE                                                                                             |
| 82934109     | Granted   | 8832248       | 1/29/2010   | 9/9/2014   | 13/386989          | US | Methods And Systems For An Interposer Board                                                                                                |
| 82937588     | Granted   | 9134783       | 3/24/2010   | 42262      | 13/386639          | US | Power Capping Feedback Normalization                                                                                                       |
| 82938235     | Granted   | 9013073       | 4/22/2010   | 42115      | 13/387169          | US | System And Method For Balancing Input Current With Parallel Power Supplies                                                                 |
| 82938243     | Granted   | 8677159       | 11/6/2009   | 41716      | 13/387054          | US | SYSTEM AND METHOD FOR EXTENDING THE USB POWER SIGNAL                                                                                       |
| 82938258     | Granted   | 8982552       | 12/28/2009  | 3/17/2015  | 13/387085          | US | A SYSTEM FOR PROVIDING PHYSICALLY SEPARATED COMPUTE AND I/O RESOURCES IN THE DATACENTER TO ENABLE SPACE AND POWER SAVINGS                  |
|              |           |               |             |            |                    |    | RESTORING STABILITY TO AN UNSTABLE BUS                                                                                                     |
| 82938271     | Granted   | 8799545       | 2/26/2010   | 41856      | 13/387186          | US | MODULAR DATA CENTER                                                                                                                        |
| 82938283     | Granted   | 8854809       | 3/22/2010   | 10/7/2014  | 13/387092          | US | CIRCUITRY FOR HOT-SWAPPABLE CIRCUIT BOARDS                                                                                                 |
| 82938289     | Granted   | 9013200       | 12/4/2009   | 42115      | 13/387654          | US | SIGNAL SENSING DEVICES AND CIRCUIT BOARDS                                                                                                  |
| 82938297     | Published |               | 12/2/2009   |            | 13/387671          | US | CLOUD ANOMALY DETECTION USING NORMALIZATION, BINNING AND ENTROPY DETERMINATION                                                             |
| 82938681     | Granted   | 8843422       | 3/31/2010   | 9/23/2014  | 13/386771          | US | QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS                                                                                              |
| 82939728     | Granted   | 8654980       | 1/28/2011   | 2/18/2014  | 13/387361          | US | MEMORY RESISTOR HAVING MULTI-LAYER ELECTRODES                                                                                              |
| 82939734     | Granted   | 8737113       | 2/8/2010    | 41786      | 13/387063          | US | TRADE-IN OPTION LEVEL                                                                                                                      |
| 82944481     | Published |               | 3/29/2012   |            | 13/434581          | US | TECHNIQUES FOR SHARING CONTENT INFORMATION WITH MEMBERS OF A VIRTUAL USER GROUP IN A NETWORK ENVIRONMENT WITHOUT COMPROMISING USER PRIVACY |
| 82947624     | Granted   | 7177904       | 5/17/2001   | 2/13/2007  | 09/861094          | US | METHOD AND SYSTEM FOR CLASSIFYING OR CLUSTERING ONE ITEM INTO MULTIPLE CATEGORIES                                                          |
| 82947629     | Granted   | 7469246       | 5/18/2001   | 39805      | 09/860646          | US | TECHNIQUES FOR ORGANIZING DATA TO SUPPORT EFFICIENT REVIEW AND ANALYSIS                                                                    |
| 82947632     | Granted   | 7945600       | 3/4/2005    | 40680      | 11/073338          | US | METHOD AND SYSTEM FOR GUIDED CLUSTER BASED PROCESSING PROTOTYPES                                                                           |
| 82947637     | Granted   | 7877388       | 10/31/2007  | 1/25/2011  | 11/931004          | US | SYSTEMS AND METHODS FOR DETERMINING COMMUNICATION CHAINS BASED ON MESSAGES                                                                 |
| 82947641     | Granted   | 7664821       | 1/26/2007   | 40225      | 11/627886          | US | CLUSTERING OF NEAR-DUPLICATE DOCUMENTS                                                                                                     |
| 82947652     | Published |               | 8/27/2010   |            | 12/870733          | US | COMPOSITE LOCALITY SENSITIVE HASH BASED PROCESSING OF DOCUMENTS                                                                            |
| 82947660     | Granted   | 8244767       | 5/21/2010   | 41135      | 12/785113          | US | ADAPTIVE ROUTING OF DOCUMENTS TO SEARCHABLE INDEXES                                                                                        |
| 82947664     | Granted   | 8484221       | 5/25/2010   | 41464      | 12/787119          | US |                                                                                                                                            |

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| 82948095     | Granted   | 5893095       | 3/28/1997   | 36256      | 08/829791          | US | SIMILARITY ENGINE FOR CONTENT-BASED RETRIEVAL OF IMAGES                                                      |
| 82948096     | Granted   | 5915250       | 3/28/1997   | 6/22/1999  | 08/829790          | US | A VISUAL IMAGE DATABASE SEARCH ENGINE WHICH ALLOWS FOR DIFFERENT SCHEMA                                      |
| 82948101     | Granted   | 5983237       | 8/21/1997   | 36473      | 08/916904          | US | VISUAL DICTIONARY                                                                                            |
| 82948110     | Granted   | 6084995       | 2/24/1998   | 36711      | 09/028279          | US | INDEXING METHOD FOR IMAGE SEARCH ENGINE                                                                      |
| 82948115     | Granted   | 7093191       | 12/21/2001  | 8/15/2006  | 10/032042          | US | VIDEO CATALOGER SYSTEM WITH SYNCHRONIZED ENCODING                                                            |
| 82948118     | Granted   | 6463444       | 8/14/1998   | 10/8/2002  | 09/134498          | US | VIDEO CATALOGER SYSTEM WITH EXTENSIBILITY                                                                    |
| 82948122     | Granted   | 7295752       | 2/5/2002    | 11/13/2007 | 10/067550          | US | VIDEO CATALOGER SYSTEM WITH AUDIO TRACK EXTRACTION                                                           |
| 82948130     | Granted   | 6833865       | 7/29/1999   | 38342      | 09/363973          | US | EMBEDDED METADATA ENGINES IN DIGITAL CAPTURE DEVICES                                                         |
| 82948135     | Granted   | 7222163       | 4/6/2001    | 5/22/2007  | 09/827772          | US | SYSTEM AND METHOD FOR HOSTING OF VIDEO CONTENT OVER A NETWORK                                                |
| 82948136     | Granted   | 7769827       | 5/22/2007   | 8/3/2010   | 11/752206          | US | INTERACTIVE VIDEO APPLICATION HOSTING                                                                        |
| 82948141     | Granted   | 8495694       | 5/12/2011   | 7/23/2013  | 13/106283          | US | VIDEO-ENABLED COMMUNITY BUILDING                                                                             |
| 82948147     | Granted   | 8548978       | 8/21/2007   | 41548      | 11/842740          | US | NETWORK VIDEO GUIDE AND SPIDERING                                                                            |
| 82948270     | Granted   | 5778364       | 1/2/1996    | 35983      | 08/581853          | US | EVALUATION OF CONTENT OF A DATA SET USING MULTIPLE AND/OR COMPLEX QUERIES                                    |
| 82948284     | Granted   | 6457047       | 5/8/2000    | 9/24/2002  | 09/566675          | US | APPLICATION CACHING SYSTEM AND METHOD                                                                        |
| 82948301     | Granted   | 6910026       | 8/27/2001   | 6/21/2005  | 09/940365          | US | METHOD AND APPARATUS FOR DETERMINING CLASSIFIER FEATURES WITH MINIMAL SUPERVISION                            |
| 82948434     | Granted   | 7085771       | 5/17/2002   | 8/1/2006   | 10/150795          | US | System and Method for Automatically Discovering a Hierarchy of Concepts from a Corpus of Documents           |
| 82948545     | Granted   | 8688695       | 5/26/2011   | 4/1/2014   | 13/116763          | US | COMPUTERIZED SEARCHABLE DOCUMENT REPOSITORY USING SEPARATE METADATA AND CONTENT STORES AND FULL TEXT INDEXES |
| 82948554     | Granted   | 8788601       | 5/26/2011   | 7/22/2014  | 13/116330          | US | RAPID NOTIFICATION SYSTEM                                                                                    |
| 82948559     | Granted   | 8442950       | 8/16/2010   | 5/14/2013  | 12/857368          | US | Data surrogate generation for data management                                                                |
| 82948602     | Granted   | 8276016       | 2/1/2010    | 9/25/2012  | 12/697990          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                |
| 82948605     | Granted   | 7917475       | 8/7/2006    | 3/29/2011  | 11/500806          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                |
| 82948608     | Granted   | 8275749       | 8/7/2006    | 41177      | 11/500821          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                |
| 82948611     | Published |               | 10/2/2006   |            | 11/541963          | US | RETRO-FITTING SYNTHETIC FULL COPIES OF DATA                                                                  |
| 82948614     | Granted   | 8271436       | 10/2/2006   | 9/18/2012  | 11/541857          | US | RETRO-FITTING SYNTHETIC FULL COPIES OF DATA                                                                  |
| 82948617     | Granted   | 8812433       | 10/2/2006   | 8/19/2014  | 11/541891          | US | DYNAMIC BULK-TO-BRICK TRANSFORMATION OF DATA                                                                 |
| 82948620     | Granted   | 8799206       | 10/2/2006   | 41856      | 11/541858          | US | DYNAMIC BULK-TO-BRICK TRANSFORMATION OF DATA                                                                 |

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| 82948636     | Granted     | 6754647       | 9/26/2000   | 6/22/2004  | 09/670478          | US | Method and apparatus for hierarchically decomposed b<br>scripts                              |
| 82948648     | Granted     | 6532401       | 6/14/2001   | 3/11/2003  | 09/883129          | US | Methods for automatically verifying the performance of<br>virtual robot                      |
| 82948651     | Granted     | 6604090       | 2/3/1998    | 8/5/2003   | 09/018213          | US | System and method for selecting responses to user input<br>an automated interface program    |
| 82948654     | Granted     | 6314410       | 4/27/1998   | 11/6/2001  | 09/067322          | US | System and method for identifying the context of a state<br>Made to a virtual robot          |
| 82948657     | Granted     | 6629087       | 3/18/1999   | 9/30/2003  | 09/271665          | US | Methods for creating and editing topics for virtual robots<br>conversing in natural language |
| 82949650     | Granted     | 8473686       | 5/5/2012    | 41450      | 13/464962          | US | Computer Cache System With Stratified Replacement                                            |
| 82951900     | Granted     | 7461085       | 11/23/2005  | 12/2/2008  | 11/286233          | US | APPARATUS AND METHOD FOR PARAMETRIC GROUP<br>PROCESSING                                      |
| 82951986     | Granted     | 8669785       | 7/31/2012   | 3/11/2014  | 13/563167          | US | LOGIC CIRCUITS USING NEURISTORS                                                              |
| 82961641     | Granted     | 8914663       | 3/28/2012   | 12/16/2014 | 13/432309          | US | RESCHEDULING FAILED BACKUP JOBS                                                              |
| 82961741     | Published   |               | 6/28/2012   |            | 13/536595          | US | Network Lane Reconfiguration                                                                 |
| 82961767     | Granted     | 8966296       | 7/17/2012   | 2/24/2015  | 13/550669          | US | TRANSITIONING A PERFORMANCE STATE OF A PROCESSOR                                             |
| 82961772     | Allowed     |               | 5/18/2012   |            | 13/475677          | US | DATA SWITCH WITH POWER BUDGETING                                                             |
| 82961795     | Granted     | 8898514       | 6/25/2012   | 11/25/2014 | 13/532287          | US | SAS STORAGE DRIVE SYSTEM WITH FAILURE INFORMATION<br>TABLE                                   |
| 82961892     | Granted     | 8806464       | 4/26/2012   | 8/12/2014  | 13/456385          | US | PROCESS FLOW OPTIMIZED DIRECTED GRAPH TRAVERSAL                                              |
| 82961932     | Granted     | 8724250       | 4/3/2012    | 5/13/2014  | 13/438461          | US | READING MAGNETIC TAPE                                                                        |
| 82961936     | Granted     | 8780485       | 4/23/2012   | 7/15/2014  | 13/453738          | US | Data Transfer of A Linear Tape Drive                                                         |
| 82961958     | Published   |               | 4/26/2012   |            | 13/456574          | US | MULTIPLE CHANNEL PHASE DETECTION                                                             |
| 82962497     | Published   |               | 4/30/2012   |            | 13/459903          | US | Data Migration                                                                               |
| 82962517     | Granted     | 8675523       | 5/30/2012   | 3/18/2014  | 13/483498          | US | OPTIMIZED SPANNING TREE CONSTRUCTION BASED ON<br>PARAMETER SELECTION                         |
| 82962525     | Allowed     |               | 8/29/2012   |            | 13/598267          | US | INSTRUCTION FORWARDING BASED ON PREDICATION<br>CRITERIA                                      |
| 82962563     | Granted     | 9128754       | 5/31/2012   | 9/8/2015   | 13/484464          | US | Resource Starvation Management In A Computer System                                          |
| 82962608     | Published   |               | 7/31/2012   |            | 13/562906          | US | EARLY RELEASE OF TRANSACTION LOCKS BASED ON TAGS                                             |
| 82962662     | Granted     | 9003091       | 10/18/2012  | 4/7/2015   | 13/655241          | US | Flow Control for a Serial Peripheral Interface Bus                                           |
| 82962682     | Granted     | 9098252       | 6/21/2012   | 8/4/2015   | 13/529257          | US | Peripheral Component Interconnect Riser Cage Fastener                                        |
| 82962834     | Allowed     |               | 4/23/2012   |            | 13/453238          | US | Dynamic Software Updates                                                                     |
| 82962855     | Published   |               | 5/30/2012   |            | 13/483785          | US | Method and System For Determining Customer Conversion                                        |
| 82962929     | Published   |               | 4/27/2012   |            | 13/458266          | US | AWARDING A GROUP- TARGETED PROMOTION                                                         |
| 82962934     | Granted     | 8856168       | 4/30/2012   | 10/7/2014  | 13/459307          | US | CONTEXTUAL APPLICATION RECOMMENDATIONS                                                       |
| 82963014     | Application |               | 3/27/2012   |            | 13/431773          | US | NESTED COMPLEX SEQUENCE PATTERN QUERIES OVER<br>EVENT STREAMS                                |
| 82963037     | Granted     | 8595799       | 4/18/2012   | 11/26/2013 | 13/449908          | US | ACCESS AUTHORIZATION                                                                         |

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| 82963084     | Published |               | 4/26/2012   |            | 13/456800 US       | US | STATEFUL SIMULATION                                                                         |
| 82963089     | Published |               | 4/26/2012   |            | 13/457449 US       | US | Open Station as Stream Analysis Operator Container                                          |
| 82963097     | Granted   | 9032527       | 4/3/2012    | 5/12/2015  | 13/438567 US       | US | INFERRING A STATE OF BEHAVIOR THROUGH MARGINAL PROBABILITY ESTIMATION                       |
| 82963101     | Published |               | 4/26/2012   |            | 13/456384 US       | US | Concatenation for Relations                                                                 |
| 82963378     | Published |               | 4/27/2012   |            | 13/458506 US       | US | METHODS AND APPARATUS FOR SYSTEM PERFORMANCE MONITORING                                     |
| 82963387     | Published |               | 4/19/2012   |            | 13/450598 US       | US | PROVIDING A CORRELATION RING FOR INDICATING CORRELATION BETWEEN ATTRIBUTES                  |
| 82963401     | Granted   | 8768977       | 7/31/2012   | 7/1/2014   | 13/562941 US       | US | Data Management Using Writeable Snapshots in Multi-Versioned Distributed B-Trees            |
| 82963409     | Allowed   |               | 4/24/2012   |            | 13/454462 US       | US | MICRO-RING OPTICAL RESONATORS                                                               |
| 82963413     | Published |               | 4/27/2012   |            | 13/458044 US       | US | MANAGING A SUSTAINABLE CLOUD COMPUTING SERVICE                                              |
| 82963438     | Granted   | 9009524       | 4/30/2012   | 4/14/2015  | 13/460807 US       | US | Prioritizing Recovery in a Storage System Implementing Rapid                                |
| 82963455     | Granted   |               | 7/13/2012   | 3/18/2014  | 13/548638 US       | US | DETECTING NETWORK ANOMALY                                                                   |
| 82963459     | Granted   | 9136894       | 4/30/2012   | 9/15/2015  | 13/460351 US       | US | HYBRID PLATFORM FOR A SOFTWARE DEFINED RADIO                                                |
| 82963475     | Published |               | 4/28/2012   |            | 13/459143 US       | US | Detecting Anomalies In Power Consumption Of Electrical Systems                              |
| 82963487     | Published |               | 4/24/2012   |            | 13/454551 US       | US | NETWORK MANAGEMENT                                                                          |
| 82963516     | Published |               | 4/27/2012   |            | 13/458854 US       | US | OPTICAL SHUFFLE SYSTEM HAVING A LENS FORMED OF SUB-WAVELENGTH GRATINGS                      |
| 82963533     | Granted   | 8693195       | 5/1/2012    | 41737      | 13/460991 US       | US | CHASSIS APPARATUS PROTRUDING ELECTRONIC DEVICES                                             |
| 82963562     | Granted   | 8767725       | 4/20/2012   | 7/1/2014   | 13/451686 US       | US | BACKPLANE MODULE                                                                            |
| 82963596     | Published |               | 4/18/2012   |            | 13/449851 US       | US | GENERATING LOAD SCENARIOS BASED ON REAL USER BEHAVIOR                                       |
| 82963636     | Published |               | 4/20/2012   |            | 13/452598 US       | US | Reputation-Based Service Valuation                                                          |
| 82963661     | Published |               | 8/30/2012   |            | 13/599803 US       | US | MODIFICATION OR ADDITION TO FORWARDING TABLE BASED ON ADDRESS                               |
| 82963670     | Granted   | 8856341       | 5/31/2012   | 41919      | 13/485079 US       | US | BALANCING MANAGEMENT DUTIES IN A CLOUD SYSTEM                                               |
| 82963813     | Published |               | 4/26/2012   |            | 13/457195 US       | US | Testing Applications                                                                        |
| 82964555     | Published |               | 4/16/2012   |            | 13/447510 US       | US | DETERMINING A MAXIMAL SIZE OF PACKETS                                                       |
| 82964560     | Granted   | 8924797       | 4/16/2012   | 42003      | 13/447512 US       | US | IDENTIFYING A DIMENSION ASSOCIATED WITH AN ABNORMAL CONDITION                               |
| 82964698     | Published |               | 4/27/2012   |            | 13/457668 US       | US | Eliciting A Customer's Product Preference Propensities Among Sub-Groups In A Social Network |
| 82964712     | Granted   | 8873369       | 4/25/2012   | 41940      | 13/455445 US       | US | FIBER CHANNEL 1:N REDUNDANCY                                                                |
| 82964744     | Granted   | 8879458       | 4/23/2012   | 11/4/2014  | 13/453664 US       | US | TRANSMISSION IN A NETWORK WITH ACTIVE AND SLEEPING CLIENTS                                  |

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| 82964789     | Published |               | 10/23/2012  |            | 13/6558075 US      | US | ADAPTIVE ANALYSIS OF SIGNALS                                                                           |
| 82964964     | Published |               | 8/29/2012   |            | 13/597689 US       | US | Identifying a Defect Density                                                                           |
| 82965371     | Granted   | 9148363       | 6/19/2012   | 42276      | 13/527226 US       | US | MULTICAST ROUTING                                                                                      |
| 82965379     | Granted   | 8750311       | 7/25/2012   | 41800      | 13/557986 US       | US | FIBRE CHANNEL HOST VIRTUALIZATION                                                                      |
| 82965396     | Published |               | 9/28/2012   |            | 13/629689 US       | US | COMPARING TARGET EFFORT TO ACTUAL EFFORT FOR SOFTWARE DEVELOPMENT REQUIREMENTS                         |
| 82965414     | Granted   | 8608493       | 4/25/2012   | 41625      | 13/456147 US       | US | KEYING MECHANISM FOR DEVICE BAY                                                                        |
| 82965428     | Published |               | 5/23/2012   |            | 13/478239 US       | US | OVER-CURRENT PROTECTION FUSES                                                                          |
| 82965448     | Granted   | 9036469       | 4/26/2012   | 42143      | 13/456292 US       | US | DATA COMMUNICATION IN OPENFLOW NETWORKS                                                                |
| 82965470     | Granted   | 8966313       | 4/30/2012   | 42059      | 13/460796 US       | US | SYSTEMS AND METHODS FOR A SHARED DEBUG PIN                                                             |
| 82965502     | Granted   | 8864388       | 5/1/2012    | 10/21/2014 | 13/460986 US       | US | FACEPLATE APPARATUS AND SYSTEM FOR COUPLING TO AN ELECTRONIC DEVICE                                    |
| 82965508     | Granted   | 9063884       | 10/23/2012  | 42178      | 13/658078 US       | US | ANALYSIS OF HEALTH INDICATORS OF A SYSTEM                                                              |
| 82965671     | Allowed   |               | 4/21/2012   |            | 13/457770 US       | US | Communicating with Verified Data                                                                       |
| 82969959     | Granted   | 8914578       | 9/27/2012   | 41989      | 13/628575 US       | US | CAPACITY-EXPANSION OF A LOGICAL VOLUME                                                                 |
| 82972658     | Published |               | 6/29/2012   |            | 13/537721 US       | US | DELEGATION WITHIN A COMPUTING ENVIRONMENT                                                              |
| 82972979     | Granted   | 8717831       | 4/30/2012   | 41765      | 13/460514 US       | US | MEMORY CIRCUIT                                                                                         |
| 82976926     | Published |               | 5/29/2012   |            | 13/482066 US       | US | NETWORK TRAFFIC MONITORING                                                                             |
| 82978166     | Granted   | 8658463       | 7/30/2012   | 2/25/2014  | 13/562063 US       | US | MEMRISTOR WITH EMBEDDED SWITCHING LAYER                                                                |
| 82978174     | Granted   | 9082972       | 7/24/2012   | 7/14/2015  | 13/557199 US       | US | BIPOLAR RESISTIVE SWITCH HEAT MITIGATION                                                               |
| 82978197     | Granted   | 8587861       | 7/17/2012   | 11/19/2013 | 13/551373 US       | US | MAKING A CROSS-LINKED POLYMER NETWORK                                                                  |
| 82978206     | Granted   | 8934745       | 7/31/2012   | 42017      | 13/563135 US       | US | APPARATUS FOR USE IN OPTOELECTRONICS HAVING A SANDWICHED LENS                                          |
| 82986335     | Granted   | 8930704       | 4/10/2012   | 42010      | 13/443285 US       | US | Digital Signature Method And System                                                                    |
| 82990637     | Published |               | 6/15/2012   |            | 13/524290 US       | US | CONTROLLING COMMUNICATION OF DATA FOR DIFFERENT USER PERSONAS                                          |
| 82990649     | Granted   | 8948180       | 10/18/2012  | 2/3/2015   | 13/654670 US       | US | ROUTING ENCAPSULATED DATA PACKETS ONTO SELECTED VLANS                                                  |
| 82990949     | Published |               | 6/20/2012   |            | 13/528590 US       | US | Determining Sensor Placement in Distributed Networks                                                   |
| 82990987     | Published |               | 6/29/2012   |            | 13/539090 US       | US | IMPLEMENTING A SOFTWARE DEFINED NETWORK USING EVENT RECORDS THAT ARE TRANSMITTED FROM A NETWORK SWITCH |
| 82990995     | Granted   | 8819078       | 7/13/2012   | 41877      | 13/549112 US       | US | EVENT PROCESSING FOR GRAPH-STRUCTURED DATA                                                             |
| 82991015     | Published |               | 10/31/2012  |            | 13/665490 US       | US | MEMORY ADDRESS TRANSLATIONS                                                                            |
| 82996597     | Published |               | 6/22/2012   |            | 13/531198 US       | US | Configuring process variants for on-boarding customer information technology (IT) outsourcing          |
| 83001260     | Granted   | D705231       | 7/12/2012   | 41779      | 29/427009 US       | US | Extended Bezel for a Blade Server                                                                      |
| 83002356     | Published |               | 4/30/2012   |            | 13/459401 US       | US | GENERATING TRIAL WIRELESS ACCESS POINT (WAP) CONFIGURATIONS                                            |

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| 83010274     | Published |               | 6/21/2012   |            | 13/528913          | US | COLLISION MEASUREMENT SYSTEM AND METHOD THEREFOR                                                         |
| 83010537     | Granted   | 8861256       | 9/28/2012   | 41926      | 13/630897          | US | Data storage in memory array with less than half of cells in any row and column in low-resistance states |
| 83010574     | Granted   | 9015428       | 9/28/2012   | 4/21/2015  | 13/630320          | US | PHYSICAL AND LOGICAL COUNTERS                                                                            |
| 83010608     | Allowed   |               | 1/29/2013   |            | 13/753238          | US | POWER STATE TRANSITION SAVING SESSION INFORMATION                                                        |
| 83010614     | Granted   | 8976033       | 2/6/2013    | 42073      | 13/760902          | US | CONTROLLER COUPLED TO VISUAL INDICATOR                                                                   |
| 83010643     | Granted   | 8812915       | 9/27/2012   | 41870      | 13/628659          | US | DETERMINING WHETHER A RIGHT TO USE MEMORY MODULES IN A RELIABILITY MODE HAS BEEN ACQUIRED                |
| 83010655     | Allowed   |               | 7/17/2012   |            | 13/550678          | US | DETERMINATION OF WHETHER STORAGE DOMAIN PATHS FOR STORAGE DEVICES INCLUDE A COMMON ROUTING MODULE        |
| 83011267     | Granted   | 8768351       | 9/27/2012   | 7/1/2014   | 13/628341          | US | Circuit-Switched Call Delivery                                                                           |
| 83011325     | Granted   | 9015184       | 6/19/2012   | 42115      | 13/526742          | US | PROTOCOL COMPLIANT ARCHIVING                                                                             |
| 83011356     | Granted   | D708216       | 6/1/2012    | 7/1/2014   | 29/423603          | US | COMPUTING DEVICE DISPLAY SCREEN WITH GRAPHICAL USER INTERFACE (As Amended)                               |
| 83011441     | Granted   | 8972645       | 9/19/2012   | 42066      | 13/622942          | US | REQUEST SENT TO STORAGE DEVICE BASED ON MOVING AVERAGE                                                   |
| 83011717     | Granted   | 8990509       | 9/24/2012   | 3/24/2015  | 13/625624          | US | ACCELERATED PATH SELECTION BASED ON NUMBER OF WRITE REQUESTS AND SEQUENTIAL TREND                        |
| 83011843     | Granted   | 8779578       | 6/29/2012   | 7/15/2014  | 13/537404          | US | Multi-chip Socket                                                                                        |
| 83012317     | Published |               | 9/24/2012   |            | 13/625575          | US | Filtering Access To Network Content                                                                      |
| 83012346     | Published |               | 4/14/2010   |            | 13/641054          | US | Method For Keyword Extraction                                                                            |
| 83012824     | Published |               | 8/29/2012   |            | 13/597638          | US | OFFLINE APPLICATION SUPPORT                                                                              |
| 83012842     | Published |               | 6/28/2012   |            | 13/536137          | US | ADHESIVELY BONDING JACKETS TO CENTRAL PROCESSING UNITS                                                   |
| 83012864     | Granted   | 9118423       | 10/25/2010  | 42241      | 13/513438          | US | POWER CONVERTER DEPENDENT ON A VOLTAGE RANGE THE INPUT VOLTAGE RESIDES IN (as amended)                   |
| 83012867     | Published |               | 8/28/2012   |            | 13/597139          | US | AUTOMATIC MOBILE APPLICATION UPDATES                                                                     |
| 83013399     | Published |               | 7/31/2012   |            | 13/562735          | US | DETERMINING SUPPLIER ENVIRONMENTAL IMPACT                                                                |
| 83013403     | Published |               | 7/31/2012   |            | 13/563030          | US | KEYWORD EXTRACTION                                                                                       |
| 83013411     | Granted   | 9015725       | 7/31/2012   | 4/21/2015  | 13/563551          | US | SYSTEMS AND METHODS FOR DISTRIBUTING A WORKLOAD IN A DATA CENTER                                         |
| 83013423     | Published |               | 7/31/2012   |            | 13/563595          | US | DISTRIBUTED TRANSACTION PROCESSING                                                                       |
| 83013431     | Granted   | 9104498       | 7/31/2012   | 8/11/2015  | 13/562764          | US | MAXIMIZING SERVER UTILIZATION WITHIN A DATACENTER                                                        |
| 83013439     | Granted   | 9002791       | 8/28/2012   | 4/7/2015   | 13/596500          | US | Logging Modifications to a Variable in Persistent Memory                                                 |
| 83013454     | Published |               | 4/27/2010   |            | 13/643925          | US | Method Of Extracting Named Entity                                                                        |
| 83013468     | Published |               | 7/30/2012   |            | 13/561482          | US | PROVIDING A MEASURE REPRESENTING AN INSTANTANEOUS DATA CONSISTENCY LEVEL                                 |

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| 83013477     | Granted     | 8793258       | 7/31/2012   | 41849      | 13/563574          | US | PREDICTING SHARING ON A SOCIAL NETWORK                                                                   |
| 83013628     | Granted     | 8867925       | 7/20/2012   | 41933      | 13/554246          | US | REDUCING ELECTRICAL CURRENT OF A SIGNAL DRIVER FOR AN OPTICAL TRANSMITTER                                |
| 83013632     | Granted     | 8385344       | 6/15/2012   | 2/26/2013  | 13/524908          | US | TRANSMITTING A PACKET FROM A DISTRIBUTED TRUNK SWITCH                                                    |
| 83013635     | Granted     | 8921960       | 7/27/2012   | 42003      | 13/560935          | US | MEMRISTOR CELL STRUCTURES FOR HIGH DENSITY ARRAYS                                                        |
| 83013654     | Granted     | 8773167       | 7/30/2012   | 41828      | 13/561978          | US | IMPLEMENTING LOGIC CIRCUITS WITH MEMRISTORS                                                              |
| 83013675     | Granted     | 8780610       | 7/27/2012   | 7/15/2014  | 13/560058          | US | STORING DATA IN A NON-VOLATILE LATCH                                                                     |
| 83013771     | Published   |               | 12/11/2012  |            | 13/710833          | US | Determining Efficient Assortments of Products                                                            |
| 83013775     | Published   |               | 7/31/2012   |            | 13/563679          | US | SYSTEMS AND METHODS FOR ANALYZING FORECASTS AND RESPONSES IN COLLABORATIVE INVENTORY MANAGEMENT SETTINGS |
| 83013803     | Published   |               | 7/31/2012   |            | 13/563658          | US | EXTRACTING RELATED CONCEPTS FROM A CONTENT STREAM USING TEMPORAL DISTRIBUTION                            |
| 83013823     | Published   |               | 7/31/2012   |            | 13/562691          | US | Queue and operator instance threads to losslessly process online input streams                           |
| 83014264     | Granted     | 8677121       | 7/31/2012   | 41688      | 13/563175          | US | MONITORING ENCRYPTED SESSION PROPERTIES                                                                  |
| 83014347     | Granted     | 9141341       | 7/16/2012   | 9/22/2015  | 13/550310          | US | INVERSION OF CONTROL FOR EXECUTABLE EXTENSIONS IN A RUN-TIME ENVIRONMENT                                 |
| 83014378     | Published   |               | 7/30/2012   |            | 13/561255          | US | DEFINING RELATIONSHIPS                                                                                   |
| 83014407     | Published   |               | 7/10/2012   |            | 13/545038          | US | ENCLOSURE TEMPERATURE SCRIPT INTERPRETER                                                                 |
| 83014438     | Granted     | 9037910       | 7/30/2012   | 5/19/2015  | 13/561989          | US | SAS SELF-TEST OPERATIONS                                                                                 |
| 83014473     | Allowed     |               | 7/31/2012   |            | 13/563628          | US | Storage Array Reservation Forwarding                                                                     |
| 83014496     | Granted     | 8856392       | 7/16/2012   | 10/7/2014  | 13/549964          | US | DIVIDING A PORT INTO SMALLER PORTS                                                                       |
| 83014922     | Granted     | 8879444       | 6/18/2012   | 11/4/2014  | 13/526251          | US | CASCADE SYSTEMS FOR NETWORK UNITS                                                                        |
| 83014954     | Granted     | 8990806       | 7/31/2012   | 3/24/2015  | 13/563069          | US | CUSTOMIZED VIRTUAL MACHINE CREATION                                                                      |
| 83014985     | Granted     | 9141288       | 7/26/2012   | 9/22/2015  | 13/559077          | US | CHARGEBACK BASED STORAGE RECOMMENDATIONS FOR DATACENTERS (as amended)                                    |
| 83014991     | Granted     | 8929236       | 7/30/2012   | 42010      | 13/561451          | US | NETWORK FLOW ANALYSIS                                                                                    |
| 83015813     | Granted     | 8959387       | 7/31/2012   | 42052      | 13/562852          | US | Tape Drive Retry                                                                                         |
| 83016763     | Published   |               | 9/28/2012   |            | 13/630253          | US | Road Maps from Clusters of Line Segments of Multiple Sources                                             |
| 83016771     | Granted     | 8781041       | 7/31/2012   | 41835      | 13/563707          | US | Reducing noise in a sequence of data by linear and non-linear estimation                                 |
| 83019079     | Application |               | 6/1/2012    |            | 29/423601          | US | A DISPLAY SCREEN FOR DISPLAYING COLLABORATIVE RESOURCES ON A COMPUTING DEVICE (As Amended)               |

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| 83019087     | Granted   | D732566       | 6/1/2012    | 42178      | 29/423602          | US | COMPUTING DEVICE INCLUDING A COMPUTERGENERATED<br>FEATURE SET FOR PROVIDING COLLABORATIVE RESOURCES                   |
| 83019099     | Granted   | D720361       | 6/1/2012    | 42003      | 29/423604          | US | COMPUTING DEVICE DISPLAYING GRAPHICAL USER<br>INTERFACE FOR PROVIDING COLLABORATIVE RESOURCE                          |
| 83019141     | Granted   | 9052956       | 8/30/2012   | 42164      | 13/599869          | US | SELECTING EXECUTION ENVIRONMENTS                                                                                      |
| 83019145     | Published |               | 11/30/2012  |            | 13/690086          | US | DIVIDING AND COMBINING OPERATIONS                                                                                     |
| 83027915     | Granted   | 9064221       | 6/21/2012   | 42178      | 13/530012          | US | SYSTEM AND METHOD FOR CABLE MONITORING                                                                                |
| 83034236     | Granted   | 8904176       | 4/28/2010   | 12/2/2014  | 13/643661          | US | Protecting The Information Encoded In A Bloom Filter Using<br>Encoded Bits Of Data                                    |
| 83034250     | Granted   | 9007895       | 4/30/2010   | 4/14/2015  | 13/643281          | US | Method For Routing Data Packets In A Fat Tree Network                                                                 |
| 83034264     | Published |               | 5/19/2010   |            | 13/696625          | US | SYSTEM AND METHOD FOR WEB PAGE SEGMENTATION<br>USING ADAPTIVE THRESHOLD COMPUTATION                                   |
| 83034272     | Granted   | 8942559       | 5/20/2010   | 42031      | 13/696631          | US | SWITCHING IN A NETWORK DEVICE                                                                                         |
| 83035764     | Granted   | 8938384       | 7/16/2012   | 1/20/2015  | 13/550346          | US | LANGUAGE IDENTIFICATION FOR DOCUMENTS CONTAINING<br>MULTIPLE LANGUAGES                                                |
| 83036777     | Granted   | 8782185       | 7/30/2012   | 7/15/2014  | 13/561518          | US | Network Booting A Machine Coupled To The Network By A<br>Link Aggregation Group                                       |
| 83037312     | Granted   | 8725749       | 7/24/2012   | 5/13/2014  | 13/556684          | US | MATCHING REGULAR EXPRESSIONS INCLUDING WORD<br>BOUNDARY SYMBOLS                                                       |
| 83037416     | Published |               | 7/31/2012   |            | 13/563018          | US | ENTITY MANAGEMENT DASHBOARD                                                                                           |
| 83037421     | Published |               | 8/10/2012   |            | 13/572301          | US | Multicast Packet Forwarding In a Network                                                                              |
| 83037461     | Published |               | 7/31/2012   |            | 13/563416          | US | CONTROLLING AN EVENT BEHAVIOR OF AN ILLUMINATION<br>INTERFACE FOR A NETWORK DEVICE                                    |
| 83037476     | Published |               | 9/14/2012   |            | 13/620255          | US | UPDATING SECURITY BINDINGS IN A NETWORK DEVICE                                                                        |
| 83037495     | Granted   | 9143408       | 7/30/2012   | 42269      | 13/561430          | US | INTERPROVIDER VIRTUAL PRIVATE NETWORK PATH<br>IDENTIFICATION                                                          |
| 83037501     | Granted   | 8760327       | 10/25/2012  | 41814      | 13/660686          | US | COORDINATE COMPRESSION USING POLYNOMIALS                                                                              |
| 83037519     | Published |               | 9/24/2012   |            | 13/625530          | US | Packet Forwarding Between Packet Forwarding Elements In A<br>Network Device                                           |
| 83037542     | Published |               | 7/27/2012   |            | 13/560332          | US | Updating Table Data in Network Device                                                                                 |
| 83037565     | Granted   | 8892343       | 7/31/2012   | 11/18/2014 | 13/562490          | US | DETERMINING A SPATIOTEMPORAL IMPACT OF A PLANNED<br>EVENT ON TRAFFIC                                                  |
| 83037576     | Granted   | 9020271       | 7/31/2012   | 42122      | 13/562524          | US | Adaptive hierarchical reclustering algorithm that yields higher<br>quality clusters and simultaneously prunes corpora |
| 83037605     | Published |               | 7/18/2012   |            | 13/551735          | US | METRICS FOR NETWORK CONFIGURATION ITEMS                                                                               |
| 83037627     | Published |               | 7/26/2012   |            | 13/559255          | US | LOCALIZING COMPUTER PROGRAM CODE                                                                                      |
| 83038174     | Granted   | 9015433       | 7/31/2012   | 42115      | 13/563223          | US | RESILIENCY WITH A DESTINATION VOLUME IN A REPLICATION<br>ENVIRONMENT                                                  |

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| 83038747     | Published   |               | 7/31/2012   |            | 13/562389          | US | DETERMINING AN ESTIMATED QUANTITY OF A CONSTITUENT COMPONENT                                    |
| 83038758     | Published   |               | 7/31/2012   |            | 13/563036          | US | VARYING RATE OF DELETABLE BITS FOR SPREAD SPECTRUM CLOCKING                                     |
| 83038764     | Published   |               | 7/31/2012   |            | 13/562569          | US | HIERARCHICAL NAVIGATION AND REMEDIATION IN DATACENTERS                                          |
| 83038781     | Published   |               | 7/30/2012   |            | 13/561593          | US | SELECTING EQUIPMENT ASSOCIATED WITH PROVIDER ENTITIES FOR A CLIENT REQUEST                      |
| 83038793     | Granted     | 9081891       | 7/31/2012   | 7/14/2015  | 13/563074          | US | RECONFIGURABLE CROSSBAR NETWORKS                                                                |
| 83038881     | Granted     | 9094817       | 7/26/2012   | 7/28/2015  | 13/559276          | US | Mobile Device Location Authentication                                                           |
| 83054218     | Granted     | 8938445       | 3/5/2010    | 42024      | 13/522787          | US | SYSTEM AND METHOD FOR ROWSET INSERTS                                                            |
| 83057075     | Granted     | 8724251       | 3/9/2010    | 5/13/2014  | 13/579481          | US | Method And System For Providing Tape-format Compatibility Between Various Types Of Tape Heads   |
| 83086483     | Granted     | 8966348       | 11/30/2012  | 42059      | 13/689814          | US | MEMORY ERROR IDENTIFICATION BASED ON CORRUPTED SYMBOL PATTERNS                                  |
| 83091101     | Published   |               | 4/30/2010   |            | 13/583020          | US | Management Data Transfer Between Processors                                                     |
| 83092492     | Granted     | 8922222       | 6/18/2010   | 12/30/2014 | 13/698002          | US | Systems And Methods For Determining Electrical Connectivity                                     |
| 83093234     | Published   |               | 6/15/2010   |            | 13/704100          | US | VOLUME MANAGEMENT                                                                               |
| 83093878     | Granted     | 8983909       | 5/4/2010    | 42080      | 13/578903          | US | INFORMATION MANAGEMENT ASSISTANT                                                                |
| 83093886     | Published   |               | 4/29/2010   |            | 13/579390          | US | Multi-jurisdiction Retention Scheduling For Record Management                                   |
| 83093963     | Allowed     |               | 8/21/2012   |            | 13/590323          | US | QUEUE WITH SEGMENTS FOR TASK MANAGEMENT                                                         |
| 83094379     | Published   |               | 5/28/2010   |            | 13/582894          | US | DISABLING A DISPLAY REFRESH PROCESS                                                             |
| 83096096     | Published   |               | 1/15/2013   |            | 13/741909          | US | FILE-BASED SOCIAL RECOMMENDATIONS IN A SOCIAL NETWORK                                           |
| 83096196     | Granted     | 8789139       | 1/11/2013   | 7/22/2014  | 13/739557          | US | Automated Test to Tell Computers and Humans Apart                                               |
| 83096204     | Granted     | 9106681       | 12/17/2012  | 8/11/2015  | 13/716781          | US | Reputation of Network Address                                                                   |
| 83096915     | Published   |               | 1/31/2013   |            | 13/755301          | US | PROVISIONING AND MANAGING CERTIFICATES FOR ACCESSING SECURE SERVICES IN NETWORK                 |
| 83097914     | Published   |               | 10/29/2012  |            | 13/662849          | US | CODELESS ARRAY VALIDATION                                                                       |
| 83097936     | Granted     | D704214       | 10/31/2012  | 41765      | 29/436078          | US | Patient oriented hospital care approach and system                                              |
| 83098005     | Granted     | 9071510       | 10/25/2012  | 42185      | 13/660878          | US | DETERMINING ROOT CAUSES OF NETWORK ISSUES                                                       |
| 83098389     | Published   |               | 1/29/2013   |            | 13/753489          | US | Expander Bypass                                                                                 |
| 83098521     | Application |               | 12/19/2012  |            | 13/719284          | US | TRIGGERING A HIGH AVAILABILITY FEATURE IN RESPONSE TO DETECTING IMPAIRMENT OF CLIENT EXPERIENCE |
| 83098555     | Published   |               | 12/26/2012  |            | 13/726690          | US | AN ADAPTIVE BASELINE BASED ON METRIC VALUES                                                     |
| 83098577     | Published   |               | 1/7/2013    |            | 13/735675          | US | FAN VIBRATION TESTING APPARATUS                                                                 |
| 83098581     | Published   |               | 10/24/2012  |            | 13/659227          | US | INCIDENT ASSIGNMENT                                                                             |
| 83098597     | Published   |               | 11/21/2012  |            | 13/683064          | US | USER INTERFACE COVERAGE                                                                         |

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| 83098638     | Published |               | 2/28/2013   |            | 13/781241 US       | US | TRANSPORT SCRIPT GENERATION BASED ON A USER INTERFACE SCRIPT                     |
| 83098664     | Granted   | 9077614       | 12/17/2012  | 7/7/2015   | 13/717093 US       | US | Prioritizing Network Faults                                                      |
| 83099390     | Published |               | 1/17/2013   |            | 13/743971 US       | US | Confidentiality of Files Using File Vectorization and Machine Learning           |
| 83099511     | Granted   | 9024285       | 4/19/2010   | 42129      | 13/636814 US       | US | NANOSCALE SWITCHING DEVICES WITH PARTIALLY OXIDIZED ELECTRODES                   |
| 83099525     | Published |               | 4/26/2010   |            | 13/640420 US       | US | NON-UNIFORM GRATING                                                              |
| 83099531     | Published |               | 4/30/2010   |            | 13/640392 US       | US | DEVICE FOR CONVERTING SIGNAL                                                     |
| 83099542     | Published |               | 1/28/2013   |            | 13/751262 US       | US | CREATING A MODEL RELATING TO EXECUTION OF A JOB ON PLATFORMS                     |
| 83099983     | Granted   | 9141791       | 11/19/2012  | 42269      | 13/680731 US       | US | MONITORING FOR ANOMALIES IN A COMPUTING ENVIRONMENT                              |
| 83100604     | Published |               | 12/11/2012  |            | 13/710574 US       | US | ORGANIZING INFORMATION DIRECTORIES                                               |
| 83100644     | Published |               | 1/31/2013   |            | 13/755582 US       | US | VIEWING-ANGLE IMAGING                                                            |
| 83100736     | Published |               | 1/31/2013   |            | 13/755612 US       | US | CLASSIFYING A SUBMISSION                                                         |
| 83100756     | Granted   | 9002818       | 1/31/2013   | 4/7/2015   | 13/755492 US       | US | CALCULATING A CONTENT SUBSET                                                     |
| 83100768     | Granted   | 8681423       | 1/29/2013   | 3/25/2014  | 13/753464 US       | US | LIGHT MODULATION EMPLOYING FLUID MOVEMENT                                        |
| 83101843     | Granted   | 9124621       | 9/27/2012   | 9/1/2015   | 13/629222 US       | US | SECURITY ALERT PRIORITIZATION                                                    |
| 83101886     | Granted   | 9070436       | 1/30/2013   | 42185      | 13/754842 US       | US | MEMORY CONTROLLER USING CRISSCROSS ERROR-CORRECTING CODES                        |
| 83101946     | Granted   | 8966328       | 12/17/2012  | 2/24/2015  | 13/716992 US       | US | DETECTING A MEMORY DEVICE DEFECT                                                 |
| 83101989     | Published |               | 11/19/2012  |            | 13/680383 US       | US | Manipulating Timelines                                                           |
| 83102004     | Granted   | 8976569       | 1/30/2013   | 3/10/2015  | 13/754431 US       | US | MITIGATION OF INOPERABLE LOW RESISTANCE ELEMENTS IN PROGRAMMABLE CROSSBAR ARRAYS |
| 83102155     | Granted   | 9161475       | 10/31/2012  | 42290      | 13/664849 US       | US | MULTI-FUNCTION MODULE FOR INSERTION INTO A NETWORKING CHASSIS SLOT               |
| 83102205     | Allowed   |               | 1/15/2013   |            | 13/741949 US       | US | BALANCING THE ALLOCATION OF VIRTUAL MACHINES IN CLOUD SYSTEMS                    |
| 83105756     | Published |               | 1/31/2013   |            | 13/755664 US       | US | CHECKPOINT GENERATION                                                            |
| 83105762     | Published |               | 1/31/2013   |            | 13/755527 US       | US | Computer Power Management                                                        |
| 83105783     | Allowed   |               | 1/31/2013   |            | 13/755647 US       | US | MEMCACHED SERVER REPLICATION                                                     |
| 83106274     | Granted   | 8935764       | 8/31/2012   | 1/13/2015  | 13/601050 US       | US | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                                 |
| 83106283     | Published |               | 2/13/2013   |            | 13/766019 US       | US | Determining Explanatoriness of Segments                                          |
| 83106321     | Allowed   |               | 12/10/2012  |            | 13/709773 US       | US | GENERATING TRAINING DOCUMENTS                                                    |
| 83106326     | Granted   | 9002102       | 12/21/2012  | 4/7/2015   | 13/725487 US       | US | Generating Training Documents                                                    |

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| 83108361     | Published |               | 12/14/2012  |            | 13/714871          | US | VISUALIZING A RELATIONSHIP OF ATTRIBUTES USING A RELEVANCE DETERMINATION PROCESS TO SELECT FROM CANDIDATE ATTRIBUTE VALUES               |
| 83108365     | Published |               | 1/21/2013   |            | 13/745985          | US | VISUALIZATION THAT INDICATES EVENT SIGNIFICANCE REPRESENTED BY A DISCRIMINATIVE METRIC COMPUTED USING A CONTINGENCY CALCULATION          |
| 83108373     | Granted   | 9081870       | 12/5/2012   | 42199      | 13/705952          | US | STREAMING SYSTEM PERFORMANCE OPTIMIZATION                                                                                                |
| 83108381     | Published |               | 12/14/2012  |            | 13/714702          | US | RELEVANCE MAP LINKING                                                                                                                    |
| 83108390     | Published |               | 1/3/2013    |            | 13/733274          | US | PRODUCT DETERMINATION FOR A PORTFOLIO                                                                                                    |
| 83108421     | Granted   | 8867406       | 4/7/2010    | 41933      | 13/583709          | US | SYSTEM AND METHOD FOR AUTOMATED DISCOVERY OF CUSTOMER-EDGE DEVICES AND INTERFACE CONNECTIONS IN A VIRTUAL-PRIVATE-NETWORKING ENVIRONMENT |
|              |           |               |             |            |                    |    |                                                                                                                                          |
| 83108482     | Granted   | 8938437       | 4/9/2010    | 42024      | 13/636412          | US | Method And System For Comparing And Locating Projects                                                                                    |
| 83108499     | Published |               | 4/9/2010    |            | 13/637814          | US | PROJECT CLUSTERING AND RELATIONSHIP VISUALIZATION                                                                                        |
| 83108891     | Published |               | 1/30/2013   |            | 13/753686          | US | OBJECTIVES OF OPERATIONS EXECUTING ACROSS ENVIRONMENTS                                                                                   |
| 83111668     | Allowed   |               | 6/22/2010   |            | 13/641567          | US | STORING DATA IN ANY OF A PLURALITY OF BUFFERS IN A MEMORY CONTROLLER                                                                     |
| 83114187     | Published |               | 4/19/2010   |            | 13/634772          | US | Selecting Products For Retailer To Offer For Sale To Consumers                                                                           |
| 83114212     | Published |               | 5/30/2010   |            | 13/634786          | US | Residual Value Warranty                                                                                                                  |
| 83114227     | Granted   | 8799238       | 10/8/2010   | 41856      | 13/634757          | US | DATA DEDUPLICATION                                                                                                                       |
| 83114418     | Published |               | 4/23/2010   |            | 13/642376          | US | UPDATING A USER INTERFACE                                                                                                                |
| 83115166     | Granted   | 8990524       | 9/27/2012   | 3/24/2015  | 13/628474          | US | MANAGEMENT OF DATA ELEMENTS OF SUBGROUPS                                                                                                 |
| 83115738     | Granted   | 9063767       | 12/20/2012  | 42178      | 13/723109          | US | CONFIGURATION SPACE WITH PSEUDO DEVICE IDENTIFIER                                                                                        |
| 83118661     | Granted   | 8676844       | 5/26/2010   | 41716      | 13/696398          | US | GRAPH AUTHORIZATION                                                                                                                      |
| 83118732     | Published |               | 5/12/2010   |            | 13/696384          | US | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE TO UPDATE VIRTUAL MACHINE TEMPLATES                                                       |
| 83120661     | Published |               | 5/28/2010   |            | 13/697972          | US | INITIALIZING A MEMORY SUBSYSTEM OF A MANAGEMENT CONTROLLER                                                                               |
| 83123092     | Allowed   |               | 4/29/2010   |            | 13/695238          | US | METHOD, SYSTEM, AND APPARATUS FOR SELECTING AN ACRONYM EXPANSION                                                                         |
| 83126881     | Published |               | 1/15/2013   |            | 13/742283          | US | Managing Volatile File Copies                                                                                                            |
| 83127147     | Published |               | 6/22/2010   |            | 13/806031          | US | METHODS AND SYSTEMS FOR PLANNING APPLICATION DEPLOYMENT                                                                                  |
| 83127182     | Published |               | 10/12/2010  |            | 13/877069          | US | TRANSACTION PROCESSING SYSTEM AND METHOD                                                                                                 |
| 83127188     | Allowed   |               | 10/13/2010  |            | 13/822374          | US | DASHBOARD INCLUDING RULES TO DATA                                                                                                        |
| 83130002     | Published |               | 5/30/2010   |            | 13/696981          | US | Virtual Machine Code Injection                                                                                                           |

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| 83131974     | Granted     | 9069954       | 5/20/2011   | 42185      | 13/699030          | US | SECURITY THREAT DETECTION ASSOCIATED WITH SECURITY EVENTS AND AN ACTOR CATEGORY MODEL |
| 83133022     | Granted     | 9071373       | 6/1/2010    | 42185      | 13/697101          | US | MULTIPEXED SERIAL MEDIA INDEPENDENT INTERFACE                                         |
| 83134891     | Allowed     |               | 6/16/2010   |            | 13/704147          | US | Computer Racks                                                                        |
| 83135457     | Allowed     |               | 8/17/2010   |            | 13/817345          | US | Encryption Key Management Using Distributed Storage                                   |
|              |             |               |             |            |                    |    | Encryption-Key Fragments                                                              |
| 83135703     | Published   |               | 5/19/2010   |            | 13/697760          | US | OPTICAL INTERCONNECT FABRICS AND OPTICAL SWITCHES                                     |
|              |             |               |             |            |                    |    | SYSTEM FOR INFORMATION MANAGEMENT PROTECTION AND ROUTING                              |
| 83135752     | Published   |               | 6/16/2010   |            | 13/697901          | US | System And Method For Optimizing Queries                                              |
| 83135892     | Published   |               | 12/19/2014  |            | 14/577611          | US | MODULE AND PORT                                                                       |
| 83136248     | Granted     | 8848360       | 6/7/2010    | 41912      | 13/702202          | US | AREA ARRAY WAVEGUIDE POWER SPLITTER                                                   |
| 83136977     | Granted     | 9052462       | 5/28/2010   | 6/9/2015   | 13/698933          | US | Computer System And Network Interface Supporting Class Of Service Queues              |
| 83137192     | Published   |               | 12/14/2012  |            | 13/715814          | US | ASSET VALUATION USING A COMPOSITE EVALUATION                                          |
|              |             |               |             |            |                    |    | ASSET RATING USING SIGNAL-TO-NOISE RATIOS                                             |
| 83137765     | Application |               | 1/31/2013   |            | 13/755400          | US | TARGET FAILURE BASED ROOT CAUSE ANALYSIS OF NETWORK PROBE FAILURES                    |
| 83137773     | Application |               | 1/31/2013   |            | 13/755313          | US | Fault Management In An IT Infrastructure                                              |
| 83138314     | Published   |               | 4/29/2013   |            | 13/872934          | US | POWER OVER ETHERNET POWER HARVESTER                                                   |
|              |             |               |             |            |                    |    | THREAT EXCHANGE INFORMATION PROTECTION                                                |
| 83138320     | Published   |               | 5/17/2013   |            | 13/897002          | US | LEAF NAMES AND RELATIVE LEVEL INDICATIONS FOR FILE SYSTEM OBJECTS                     |
| 83138337     | Allowed     |               | 1/30/2013   |            | 13/754191          | US | ATTACK NOTIFICATION                                                                   |
| 83138345     | Granted     | 9143517       | 1/31/2013   | 9/22/2015  | 13/754951          | US | SIMULATING REAL USER ISSUES IN SUPPORT ENVIRONMENTS                                   |
| 83138403     | Published   |               | 1/25/2013   |            | 13/749955          | US | OPTICAL TRANSMITTER AND RECEIVER CIRCUIT ARRANGEMENT                                  |
|              |             |               |             |            |                    |    | INLINE FUSES IN PROGRAMMABLE CROSSBAR ARRAYS                                          |
| 83138411     | Published   |               | 1/31/2013   |            | 13/755007          | US | DETERMINING A COUNTEROFFER                                                            |
| 83138489     | Published   |               | 1/21/2013   |            | 13/746025          | US | REDUNDANT LIGHT SUPPLY FOR SILICON PHOTONIC CHIP                                      |
|              |             |               |             |            |                    |    | APPARATUS AND METHOD FOR MULTI-MODE STORAGE                                           |
| 83138586     | Granted     | 9008518       | 1/30/2013   | 42108      | 13/753949          | US | BACKLIGHT HAVING DUAL COLLIMATING REFLECTORS                                          |
|              |             |               |             |            |                    |    | TEST INFRASTRUCTURE SIMULATION                                                        |
| 83138615     | Granted     | 8917537       | 1/30/2013   | 41996      | 13/754616          | US | MODIFY EXECUTION OF APPLICATION UNDER TEST SO USER IS POWER USER                      |
| 83138637     | Published   |               | 1/31/2013   |            | 13/756268          | US | ALLOCATING TEST CAPACITY FROM CLOUD SYSTEMS                                           |
| 83138677     | Published   |               | 1/29/2013   |            | 13/753510          | US | CONTEXT-AWARE INFORMATION ITEM RECOMMENDATIONS FOR DEALS                              |
| 83138681     | Allowed     |               | 7/8/2013    |            | 13/936986          | US |                                                                                       |
| 83138718     | Granted     | 8915635       | 3/13/2013   | 12/23/2014 | 13/801996          | US |                                                                                       |
| 83138763     | Published   |               | 1/28/2013   |            | 13/751406          | US |                                                                                       |
| 83138769     | Published   |               | 2/28/2013   |            | 13/780662          | US |                                                                                       |
| 83138795     | Published   |               | 1/28/2013   |            | 13/751498          | US |                                                                                       |
| 83138852     | Published   |               | 1/25/2013   |            | 13/750187          | US |                                                                                       |

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| 83138881     | Published |               | 1/31/2013   |            | 13/755836 US       | US | IDENTIFYING SUBSETS OF SIGNIFIERS TO ANALYZE           |
| 83138927     | Published |               | 3/13/2013   |            | 13/801712 US       | US | DETERMINING TARGET CUSTOMERS DURING MARKETING          |
| 83138981     | Granted   | 9083736       | 1/28/2013   | 42199      | 13/751695 US       | US | MONITORING AND MITIGATING CLIENT-SIDE EXPLOITATION     |
|              |           |               |             |            |                    |    | OF APPLICATION FLAWS                                   |
| 83139124     | Granted   | 8990165       | 7/13/2010   | 42087      | 13/704344 US       | US | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE         |
|              |           |               |             |            |                    |    | ARCHIVE DATA                                           |
| 83139127     | Granted   | 9135193       | 3/25/2013   | 42262      | 13/849616 US       | US | EXPANDER INTERRUPT PROCESSING                          |
| 83139135     | Granted   | 8941330       | 3/21/2013   | 1/27/2015  | 13/848516 US       | US | LIGHT SOURCE OPERATION                                 |
| 83139239     | Granted   | 8914416       | 1/31/2013   | 12/16/2014 | 13/755556 US       | US | SEMANTICS GRAPHS FOR ENTERPRISE COMMUNICATION          |
|              |           |               |             |            |                    |    | NETWORKS                                               |
| 83139256     | Allowed   |               | 1/29/2013   |            | 13/753022 US       | US | IDENTIFYING TASKS AND COMMITMENTS USING NATURAL        |
|              |           |               |             |            |                    |    | LANGUAGE PROCESSING AND MACHINE LEARNING (as           |
|              |           |               |             |            |                    |    | amended)                                               |
| 83139261     | Allowed   |               | 1/30/2013   |            | 13/754241 US       | US | SCALABLE STRUCTURED DATA STORE OPERATIONS              |
| 83139270     | Published |               | 1/31/2013   |            | 13/755311 US       | US | Reducing backup bandwidth by remembering downloads     |
| 83139284     | Published |               | 1/31/2013   |            | 13/756156 US       | US | TASK CROWDSOURCING WITHIN AN ENTERPRISE                |
| 83139391     | Published |               | 1/30/2013   |            | 13/754054 US       | US | ANTICIPATORILY RETRIEVING INFORMATION IN RESPONSE TO   |
|              |           |               |             |            |                    |    | A QUERY OF A DIRECTORY                                 |
| 83139445     | Published |               | 1/30/2013   |            | 13/754099 US       | US | RECONSTRUCTING A STATE OF A FILE SYSTEM USING A        |
|              |           |               |             |            |                    |    | PRESERVED SNAPSHOT                                     |
| 83139453     | Published |               | 1/31/2013   |            | 13/756144 US       | US | TAPE DRIVE CACHE MEMORY                                |
| 83139476     | Published |               | 2/19/2013   |            | 13/770456 US       | US | Planar Structure Characteristics Obtained With Look Up |
|              |           |               |             |            |                    |    | Tables                                                 |
| 83139680     | Granted   | 9101081       | 1/30/2013   | 42220      | 13/754761 US       | US | Data Center Canopy Including Turning Vanes             |
| 83139719     | Published |               | 1/30/2013   |            | 13/754126 US       | US | Authenticating Applications to a Network Service       |
| 83139742     | Published |               | 1/23/2013   |            | 13/748342 US       | US | Implementing Gateway Redundancy in a Network           |
| 83139808     | Published |               | 6/30/2010   |            | 13/701866 US       | US | SYSTEM AND METHOD FOR COLLABORATIVE INFORMATION        |
|              |           |               |             |            |                    |    | SERVICES                                               |
| 83140043     | Published |               | 1/31/2013   |            | 13/755084 US       | US | POWER OVER ETHERNET MANAGEMENT ON A NETWORK            |
|              |           |               |             |            |                    |    | SWITCH                                                 |
| 83140106     | Published |               | 12/17/2012  |            | 13/717151 US       | US | PRESENTING DOCUMENTS TO A USER BASED ON TOPICS AND     |
|              |           |               |             |            |                    |    | COLLECTIVE OPINIONS EXPRESSED IN THE DOCUMENTS         |
| 83140415     | Published |               | 4/29/2013   |            | 13/872940 US       | US | A Shielding Panel Having an Opening for a Heat Sink    |
| 83140507     | Published |               | 12/21/2012  |            | 13/723480 US       | US | ACCESS POINTS TO PROVIDE EVENT NOTIFICATIONS           |
| 83140845     | Allowed   |               | 1/30/2013   |            | 13/754570 US       | US | Delta partitions for backup and restore                |
| 83140850     | Published |               | 2/27/2013   |            | 13/778890 US       | US | DISTRIBUTED IMPLEMENTATION OF SEQUENTIAL CODE THAT     |
|              |           |               |             |            |                    |    | INCLUDES A FUTURE                                      |

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| 83140891     | Granted     | D706273       | 1/4/2013    | 6/3/2014   | 29/441453          | US | BEZEL FOR A COMPUTING DEVICE                                                                                                         |
| 83140954     | Granted     | 8984230       | 1/30/2013   | 42080      | 13/754758          | US | METHOD OF USING A BUFFER WITHIN AN INDEXING                                                                                          |
| 83140967     | Published   |               | 1/31/2013   |            | 13/755661          | US | ACCELERATOR DURING PERIODS OF INACTIVITY                                                                                             |
|              |             |               |             |            |                    |    | Executing Requests from Processing Elements with Stackable Memory Devices                                                            |
| 83140976     | Granted     | 8943353       | 1/31/2013   | 42031      | 13/756155          | US | ASSIGNING NODES TO JOBS BASED ON RELIABILITY FACTORS                                                                                 |
| 83141140     | Application |               | 1/14/2013   |            | 29/443194          | US | DOCUMENT READER USER INTERFACE FOR PRESENTING DOCUMENTS TO A USER BASED ON TOPICS AND COLLECTIVE OPINIONS EXPRESSED IN THE DOCUMENTS |
| 83141159     | Published   |               | 1/25/2013   |            | 13/750896          | US | RAID STORAGE REBUILD PROCESSING                                                                                                      |
| 83141511     | Allowed     |               | 2/28/2013   |            | 13/781293          | US | SAS Latency Based Routing                                                                                                            |
| 83141515     | Published   |               | 3/29/2013   |            | 13/853873          | US | SAS EXPANDER                                                                                                                         |
| 83141534     | Published   |               | 4/5/2013    |            | 13/857944          | US | DATA STORAGE                                                                                                                         |
| 83148959     | Granted     | 8893283       | 1/31/2013   | 41961      | 13/755876          | US | Performing an Automated Compliance Audit by Vulnerabilities                                                                          |
| 83150110     | Granted     |               | 3/1/2013    | 42227      | 13/781826          | US | IDENTIFYING AN INCIDENT-ADDRESSING STEP                                                                                              |
| 83150130     | Allowed     | 9104753       | 2/21/2013   |            | 13/773088          | US | SAMPLE BASED DETERMINATION OF NETWORK POLICY VIOLATIONS                                                                              |
| 83154799     | Published   |               | 4/29/2013   |            | 13/872915          | US | MANAGEMENT OF WIRELESS CHANNEL USE                                                                                                   |
| 83155640     | Allowed     |               | 3/13/2013   |            | 13/800304          | US | WEIGHT-BASED COLLOCATION MANAGEMENT                                                                                                  |
| 83156491     | Published   |               | 3/28/2013   |            | 13/852179          | US | DATA CACHE FOR A STORAGE ARRAY                                                                                                       |
| 83156571     | Published   |               | 3/13/2013   |            | 13/799290          | US | Non-Volatile Memory Update Tracking                                                                                                  |
| 83156582     | Published   |               | 4/26/2013   |            | 13/871187          | US | APPLYING WRITE ELISION                                                                                                               |
| 83159791     | Published   |               | 7/26/2010   |            | 13/809064          | US | Mitigation Of Detected Patterns In A Network Device                                                                                  |
| 83159860     | Allowed     |               | 9/15/2010   |            | 13/808507          | US | COMPUTER SYSTEM WITH FABRIC MODULES                                                                                                  |
| 83160158     | Published   |               | 7/30/2010   |            | 13/808622          | US | METHOD AND SYSTEM OF CONTROLLING POWER CONSUMPTION OF AGGREGATED I/O PORTS                                                           |
|              |             |               |             |            |                    |    | Power Capping System                                                                                                                 |
| 83163776     | Published   |               | 9/16/2010   |            | 13/810357          | US | FORMATTING SYSTEM MONITORING INFORMATION                                                                                             |
| 83164626     | Allowed     |               | 7/20/2010   |            | 13/809690          | US | NANOSCALE SWITCHING DEVICE                                                                                                           |
| 83164637     | Granted     | 8912520       | 7/21/2010   | 41989      | 13/809498          | US | VISUAL SEPARATOR DETECTION IN WEB PAGES USING CODE ANALYSIS                                                                          |
| 83164709     | Published   |               | 7/30/2010   |            | 13/812092          | US | SQL Enumerator                                                                                                                       |
| 83166229     | Published   |               | 7/22/2010   |            | 13/810896          | US | A System Including A Module                                                                                                          |
| 83166323     | Granted     | 9107294       | 7/26/2010   | 42227      | 13/810665          | US | FILE TRANSFERS BASED ON TELEPHONE NUMBERS                                                                                            |
| 83166332     | Allowed     |               | 7/30/2010   |            | 13/810348          | US | POWER RAIL REGULATOR TO REGULATE DC RAIL VOLTAGE AND OUTPUT CURRENT                                                                  |
| 83166378     | Granted     | 8912771       | 9/13/2010   | 41989      | 13/814043          | US | LOCATION-INDEXED AUDIO CONTENT                                                                                                       |
| 83166392     | Published   |               | 7/30/2010   |            | 13/812123          | US |                                                                                                                                      |

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| 83167099     | Granted   | 8922981       | 10/4/2010   | 42003      | 13/810582          | US | RACK MOUNTED UI DEVICE                                                                       |
| 83167834     | Allowed   |               | 10/16/2010  |            | 13/817932          | US | DEVICE HARDWARE AGENT                                                                        |
| 83167838     | Published |               | 10/29/2010  |            | 13/817842          | US | SIGNAL MANAGER                                                                               |
| 83168805     | Published |               | 8/20/2010   |            | 13/817366          | US | SYSTEMS AND METHODS FOR FILTERING WEB PAGE CONTENTS                                          |
| 83169583     | Published |               | 7/30/2010   |            | 13/813243          | US | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                       |
| 83174522     | Published |               | 10/13/2010  |            | 13/813128          | US | SYSTEMS AND METHODS FOR MODELING BINARY SYNTAXES                                             |
| 83174555     | Granted   | 9160759       | 2/6/2013    | 10/13/2015 | 13/760944          | US | Security System For Protecting Networks From Vulnerability Exploits                          |
| 83174561     | Published |               | 7/30/2010   |            | 13/812578          | US | CONFIGURATION MANAGEMENT                                                                     |
| 83177094     | Published |               | 7/30/2010   |            | 13/813254          | US | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                       |
| 83177106     | Published |               | 7/30/2010   |            | 13/813258          | US | COMPUTER SYSTEM AND METHOD FOR SHARING COMPUTER MEMORY                                       |
| 83187256     | Published |               | 8/25/2010   |            | 13/813965          | US | TRANSFERRING FILES                                                                           |
| 83189168     | Granted   | 9116805       | 10/6/2010   | 42241      | 13/814700          | US | METHOD AND SYSTEM FOR PROCESSING EVENTS                                                      |
| 83193845     | Published |               | 10/27/2010  |            | 13/817667          | US | PROVIDING CONTROL OVER A PERSONALIZED CATEGORY OF INFORMATION                                |
| 83195282     | Published |               | 10/13/2010  |            | 13/816980          | US | CREATING A CONFIGURATION FILE TEMPLATE                                                       |
| 83196416     | Published |               | 9/7/2010    |            | 13/818109          | US | SYSTEM AND METHOD FOR AUTOMATED DEPLOYMENT OF MULTI-COMPONENT COMPUTER ENVIRONMENT           |
| 83200323     | Published |               | 6/10/2013   |            | 13/914355          | US | ESTIMATING A QUANTITY OF EXPLOITABLE SECURITY VULNERABILITIES IN A RELEASE OF AN APPLICATION |
|              |           |               |             |            |                    |    |                                                                                              |
| 83200361     | Allowed   |               | 5/1/2013    |            | 13/874774          | US | DATA RELAY BY SERVER                                                                         |
| 83200410     | Allowed   |               | 9/23/2010   |            | 13/818850          | US | METHODS, APPARATUS AND SYSTEMS FOR MONITORING LOCATIONS OF DATA WITHIN A NETWORK SERVICE     |
| 83204419     | Granted   | 9092696       | 3/26/2013   | 42213      | 13/850413          | US | Image Sign Classifier                                                                        |
| 83204443     | Published |               | 3/15/2013   |            | 13/842821          | US | DATA ANALYSIS IN A NETWORK                                                                   |
| 83204600     | Published |               | 6/4/2013    |            | 13/909901          | US | ASSESSING THE IMPACT OF AN INCIDENT IN A SERVICE LEVEL AGREEMENT                             |
| 83204631     | Published |               | 6/27/2013   |            | 13/928489          | US | ANALYZING PARTICIPANTS OF A SOCIAL NETWORK                                                   |
| 83204635     | Granted   | 9143403       | 6/19/2013   | 42269      | 13/921343          | US | AUTONOMOUS METRIC TRACKING AND ADJUSTMENT                                                    |
| 83204643     | Published |               | 4/25/2013   |            | 13/870295          | US | Classifying Source Code Using An Expertise Model                                             |
| 83204680     | Allowed   |               | 7/2/2013    |            | 13/933657          | US | DERIVING AN INTERESTINGNESS MEASURE FOR A CLUSTER                                            |
| 83204688     | Published |               | 3/15/2013   |            | 13/832644          | US | REQUESTS FOR SOURCE CODE TEXT                                                                |

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| 83204732     | Published |               | 5/31/2013   |            | 13/907572 US       | US | DEVICE MONITORING                                                                             |
| 83204738     | Published |               | 6/7/2013    |            | 13/912344 US       | US | METER DATA MANAGEMENT TESTING                                                                 |
| 83204818     | Published |               | 6/27/2013   |            | 13/929249 US       | US | MILLIMETER WAVE FREQUENCY DATA COMMUNICATION SYSTEMS                                          |
| 83205172     | Granted   | 9098634       | 5/13/2013   | 42220      | 13/892819 US       | US | CREATING TEST TEMPLATES BASED ON STEPS IN EXISTING TESTS                                      |
| 83205213     | Published |               | 3/27/2013   |            | 13/851134 US       | US | ASSOCIATING EVENT TEMPLATES WITH EVENT OBJECTS                                                |
| 83205247     | Published |               | 4/30/2013   |            | 13/874179 US       | US | APPLICATION THREAD TO CACHE ASSIGNMENT                                                        |
| 83205273     | Published |               | 3/18/2013   |            | 13/845399 US       | US | DETERMINE VOLTAGE SUPPLIED TO A CORE                                                          |
| 83205278     | Published |               | 3/19/2013   |            | 13/846992 US       | US | THREADS IN OPERATING SYSTEMS WITHOUT KERNEL THREADS SUPPORT                                   |
| 83206029     | Published |               | 4/30/2013   |            | 13/873459 US       | US | CACHING CIRCUIT WITH PREDETERMINED HASH TABLE ARRANGEMENT                                     |
| 83206769     | Published |               | 5/31/2013   |            | 13/907674 US       | US | REMAP RAID TO MAINTAIN RAID LEVEL                                                             |
| 83206773     | Published |               | 6/4/2013    |            | 13/909759 US       | US | BOOT FROM LOGICAL VOLUME SPANNING PLURALITY OF PCI DEVICES                                    |
| 83206787     | Granted   | 9134910       | 4/30/2013   | 42262      | 13/874344 US       | US | SET HEAD FLAG OF REQUEST                                                                      |
| 83206935     | Published |               | 5/30/2013   |            | 13/906291 US       | US | ALLOCATION OF CACHE TO STORAGE VOLUMES                                                        |
| 83206941     | Published |               | 6/21/2013   |            | 13/923370 US       | US | CACHE NODE PROCESSING                                                                         |
| 83206950     | Granted   | 9040948       | 9/16/2010   | 42150      | 13/821173 US       | US | NANOSCALE SWITCHING DEVICE                                                                    |
| 83207276     | Allowed   |               | 4/5/2013    |            | 13/857533 US       | US | MOBILE WEB-BASED PLATFORM FOR PROVIDING A CONTEXTUAL ALIGNMENT VIEW OF A CORPUS OF DOCUMENTS  |
| 83207705     | Published |               | 6/27/2013   |            | 13/929453 US       | US | Power Down Signal For Port Of Network Device                                                  |
| 83207838     | Published |               | 5/30/2013   |            | 13/906091 US       | US | EXCLUDING A DATA FRAME FROM A LINK AGGREGATION GROUP                                          |
| 83208808     | Published |               | 9/10/2010   |            | 13/821110 US       | US | SYSTEM AND METHOD FOR INTERPRETING AND GENERATING INTEGRATION FLOWS                           |
| 83209023     | Granted   | 8923073       | 11/1/2010   | 12/30/2014 | 13/823826 US       | US | STORAGE ELEMENT READING USING RING OSCILLATOR                                                 |
| 83209080     | Granted   | 8856889       | 10/19/2010  | 41919      | 13/821438 US       | US | METHODS AND SYSTEMS FOR GENERATION OF AUTHORIZED VIRTUAL APPLIANCES                           |
| 83209123     | Published |               | 4/30/2013   |            | 13/874235 US       | US | DETERMINING CANDIDATE SCRIPTS FROM A CATALOG OF SCRIPTS                                       |
| 83209180     | Published |               | 4/24/2013   |            | 13/869359 US       | US | SYNCHRONIZATION OF AN AUTOMATION SCRIPT                                                       |
| 83209641     | Allowed   |               | 4/30/2013   |            | 13/873680 US       | US | HOTSPOT IDENTIFICATION                                                                        |
| 83209749     | Published |               | 4/30/2013   |            | 13/873587 US       | US | SUPPORT VECTOR MACHINE                                                                        |
| 83209810     | Published |               | 4/30/2013   |            | 13/874186 US       | US | AUTOREGRESSIVE MODEL FOR TIME-SERIES DATA                                                     |
| 83209816     | Published |               | 3/15/2013   |            | 13/841514 US       | US | Visual Analytics of Multivariate Session Data Using Concentric Rings with Overlapping Periods |

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| 83209827     | Published |               | 5/30/2013   |            | 13/905571          | US | DETERMINING A COMPLETION TIME OF A JOB IN A DISTRIBUTED NETWORK ENVIRONMENT                  |
| 83209832     | Published |               | 5/31/2013   |            | 13/906707          | US | Granting Permission to Use an Object Remotely with a Context Preserving Mechanism            |
| 83209836     | Published |               | 4/30/2013   |            | 13/874181          | US | Portfolio Generation                                                                         |
| 83209861     | Published |               | 3/15/2013   |            | 13/832805          | US | Performing Cross-Validation Using Non-Randomly Selected Cases                                |
| 83209867     | Granted   | 8829581       | 4/19/2013   | 41891      | 13/866625          | US | RESISTIVE MEMORY DEVICES                                                                     |
| 83209881     | Granted   | 9053434       | 3/15/2013   | 42164      | 13/842461          | US | Determining an Obverse Weight                                                                |
| 83209890     | Published |               | 4/30/2013   |            | 13/874328          | US | MANAGEMENT OF CLASSIFICATION FRAMEWORKS TO IDENTIFY APPLICATIONS                             |
| 83209899     | Published |               | 4/30/2013   |            | 13/874254          | US | SYNTHETIC TIME SERIES DATA GENERATION                                                        |
| 83210534     | Published |               | 4/30/2013   |            | 13/874221          | US | Method for generating realistic synthetic resource consumption data                          |
| 83210560     | Published |               | 10/29/2010  |            | 13/821208          | US | Software Application Recognition                                                             |
| 83210574     | Granted   | 8873192       | 7/30/2013   | 10/28/2014 | 13/954209          | US | MAGNETIC TAPE HEADS                                                                          |
| 83213138     | Allowed   |               | 11/2/2010   |            | 13/822249          | US | SOLID-STATE DISK (SSD) MANAGEMENT                                                            |
| 83213646     | Published |               | 9/3/2013    |            | 14/016413          | US | BACKPLANE CONTROLLER TO ARBITRATE MULTIPLEXING OF COMMUNICATION                              |
| 83213705     | Published |               | 5/17/2013   |            | 13/896497          | US | MARKET FOR RESOURCES BASED ON REUSABLE USAGE POINTS AND USAGE PERIODS (as amended)           |
| 83214673     | Published |               | 11/12/2010  |            | 13/824517          | US | DETERMINE AUTHORIZATION OF A SOFTWARE PRODUCT BASED ON A FIRST AND SECOND AUTHORIZATION ITEM |
| 83214678     | Published |               | 9/30/2010   |            | 13/823228          | US | IDENTIFICATION OF EVENTS OF INTEREST                                                         |
| 83214687     | Published |               | 10/11/2010  |            | 13/825019          | US | SYSTEM AND METHOD FOR QUERYING A DATA STREAM                                                 |
| 83214690     | Published |               | 10/14/2010  |            | 13/825024          | US | Providing Operational Business Intelligence                                                  |
| 83214693     | Published |               | 10/14/2010  |            | 13/825043          | US | DATASET COMPRESSION                                                                          |
| 83219396     | Granted   | 9065587       | 10/8/2010   | 42178      | 13/825950          | US | OPTICAL MULTIPLEXING USING LASER ARRAYS                                                      |
| 83219401     | Published |               | 10/11/2010  |            | 13/877319          | US | MICROFLUIDIC CHIP ASSEMBLY                                                                   |
| 83221552     | Published |               | 3/26/2013   |            | 13/850991          | US | VIRTUAL MACHINES                                                                             |
| 83222070     | Published |               | 10/27/2010  |            | 13/876586          | US | PATTERN DETECTION                                                                            |
| 83222118     | Published |               | 10/13/2010  |            | 13/878417          | US | AUTOMATED NEGOTIATION                                                                        |
| 83222132     | Published |               | 10/29/2010  |            | 13/879427          | US | GENERATING A TAXONOMY FROM UNSTRUCTURED INFORMATION                                          |
| 83222716     | Published |               | 11/10/2010  |            | 13/883934          | US | SEED SET EXPANSION                                                                           |
| 83224726     | Granted   | 9141462       | 2/24/2011   | 9/22/2015  | 13/977015          | US | SYSTEM AND METHOD FOR ERROR REPORTING IN A NETWORK                                           |
| 83224937     | Published |               | 10/15/2010  |            | 13/878420          | US | SYSTEM AND METHOD FOR PROVIDING A SERVICE                                                    |
| 83225190     | Granted   | 9014567       | 10/8/2010   | 42115      | 13/877641          | US | ELECTRONIC SYSTEM HAVING FANOUT OPTICAL BUSES                                                |

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| 83225196     | Allowed   |               | 10/8/2010   |            | 13/877638          | US | OPTICAL POLARIZATION MULTIPLEXING USING LASER ARRAYS                                              |
| 83225980     | Published |               | 11/27/2010  |            | 13/883488          | US | Causal Dynamic Model For Revenue                                                                  |
| 83225983     | Published |               | 11/27/2010  |            | 13/883498          | US | Composite Driver Derivation                                                                       |
| 83227144     | Published |               | 4/30/2013   |            | 13/873673          | US | SEMANTIC ZOOM-IN OR DRILL-DOWN IN A VISUALIZATION                                                 |
|              |           |               |             |            |                    |    | HAVING CELLS WITH SCALE ENLARGEMENT AND CELL POSITION ADJUSTMENT                                  |
| 83231550     | Granted   | 8837713       | 10/27/2010  | 41898      | 13/879899          | US | SYSTEMS, METHODS, AND APPARATUS FOR ENABLING A VIDEO TRANSMISSION WITHIN A COMMUNICATIONS SESSION |
| 83235820     | Published |               | 10/29/2010  |            | 13/880316          | US | SMALL-MODE-VOLUME, VERTICAL-CAVITY, SURFACE-EMITTING LASER                                        |
| 83241900     | Granted   | 9064129       | 4/7/2011    | 42178      | 13/882692          | US | Managing Data                                                                                     |
| 83241998     | Published |               | 10/28/2010  |            | 13/881081          | US | SYSTEMS AND METHODS FOR SYNTHESIZING MOLECULES ON SUBSTRATES                                      |
| 83242138     | Published |               | 10/29/2010  |            | 13/881134          | US | OPTICAL INTERCONNECT FABRICS IMPLEMENTED WITH STAR COUPLERS                                       |
| 83243069     | Allowed   |               | 10/29/2010  |            | 13/881452          | US | MEMRISTORS HAVING AT LEAST ONE JUNCTION                                                           |
| 83254896     | Granted   | D739404       | 6/24/2013   | 9/22/2015  | 29/458889          | US | HARD DRIVE TRAY DEVICE                                                                            |
| 83255666     | Granted   | 8942026       | 2/28/2011   | 42031      | 13/883510          | US | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                           |
| 83256513     | Published |               | 5/2/2013    |            | 13/875970          | US | Autonomous Network Device Configuration Method                                                    |
| 83259822     | Published |               | 12/15/2010  |            | 13/988744          | US | SYSTEM, ARTICLE, AND METHOD FOR ANNOTATING RESOURCE VARIATION                                     |
| 83260523     | Published |               | 5/17/2013   |            | 13/897094          | US | Network Switch Configuration                                                                      |
| 83262502     | Allowed   |               | 1/28/2011   |            | 13/988090          | US | AUTOMATED CONTRACT MANAGEMENT                                                                     |
| 83262522     | Published |               | 12/3/2010   |            | 13/885003          | US | SYSTEMS AND METHODS FOR PERFORMING A NESTED JOIN OPERATION                                        |
| 83262539     | Published |               | 12/10/2010  |            | 13/885017          | US | MANAGING RECORDS DISPLAYED IN A TREE LIST                                                         |
| 83262559     | Published |               | 1/27/2011   |            | 13/885984          | US | IMPORTANCE CLASS BASED DATA MANAGEMENT                                                            |
| 83262570     | Published |               | 1/25/2011   |            | 13/885032          | US | ANALYTICAL DATA PROCESSING                                                                        |
| 83265874     | Published |               | 1/27/2011   |            | 13/885942          | US | IDENTIFY POTENTIAL ACCOUNT NUMBERS IN A SINGLE PASS OF A LIST OF DIGITS                           |
| 83265939     | Published |               | 2/11/2011   |            | 13/885973          | US | DETERMINING CHARACTERISTICS OF PARTICIPANTS IN A SOCIAL NETWORK                                   |
| 83268813     | Published |               | 6/25/2013   |            | 13/926039          | US | AMBIGUOUS QUERIES IN CONFIGURATION MANAGEMENT DATABASES                                           |
| 83268948     | Published |               | 9/9/2013    |            | 14/021755          | US | Method For Determining Network Topology                                                           |
| 83269855     | Granted   | 9025365       | 5/21/2013   | 5/5/2015   | 13/899283          | US | READING MEMORY ELEMENTS WITHIN A CROSSBAR ARRAY                                                   |

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| 83270021     | Published |               | 5/31/2013   |            | 13/907509          | US | A MARKET FOR RESOURCES BASED ON REUSABLE USAGE POINTS AND USAGE PERIODS             |
| 83270328     | Published |               | 10/21/2011  |            | 13/989129          | US | SYSTEMS AND METHODS FOR PROVIDING PROMOTIONAL CONTENT DURING A CALL ATTEMPT         |
| 83271678     | Published |               | 3/30/2011   |            | 13/989168          | US | SYSTEMS AND METHODS FOR GENERATING A SHORTENED NOTIFICATION OF AN INCOMING CALL     |
| 83271701     | Published |               | 1/31/2011   |            | 13/980901          | US | METHODS FOR HANDLING CONFLICTS IN A MULTICAST ROUTING ELECTION                      |
| 83272380     | Allowed   |               | 6/28/2013   |            | 13/931042          | US | KEY RETRIEVAL                                                                       |
| 83272431     | Allowed   |               | 8/6/2013    |            | 13/960747          | US | IDENTIFIER MANAGEMENT                                                               |
| 83273845     | Granted   | D735192       | 7/8/2013    | 7/28/2015  | 29/460123          | US | MICROSERVER                                                                         |
| 83277650     | Published |               | 1/11/2011   |            | 13/995492          | US | PASSIVE OPTICAL ALIGNMENT                                                           |
| 83278385     | Granted   | 8737785       | 6/26/2013   | 5/27/2014  | 13/927562          | US | OPTICAL BEAM COUPLERS AND SPLITTERS                                                 |
| 83410700     | Published |               | 1/9/2011    |            | 13/994820          | US | COMPUTER NETWORK NODE DISCOVERY SEQUENCING                                          |
| 83415105     | Published |               | 12/21/2010  |            | 13/995187          | US | SYSTEM FOR MANAGING ADDRESS REFLECTORS                                              |
| 83415242     | Granted   | RE45070       | 5/9/2013    | 41863      | 13/891049          | US | Receive Processing With Network Protocol Bypass                                     |
| 83416919     | Allowed   |               | 2/28/2011   |            | 13/984168          | US | SPRING LOADED LID (as amended)                                                      |
| 83417500     | Published |               | 7/26/2013   |            | 13/951997          | US | RELEASE LATCH                                                                       |
| 83417898     | Published |               | 1/24/2011   |            | 13/980849          | US | SYSTEM AND METHOD FOR ACCESSING A SERVICE                                           |
| 83421542     | Published |               | 1/20/2011   |            | 13/977911          | US | CHIP CARRIER SUPPORT SYSTEMS                                                        |
| 83422035     | Published |               | 1/31/2011   |            | 13/977909          | US | METHODS AND SYSTEMS TO GENERATE REPORTS INCLUDING REPORT REFERENCES FOR NAVIGATION  |
| 83422061     | Published |               | 1/31/2011   |            | 13/977912          | US | CABLE HARNESS SWITCHES                                                              |
| 83422495     | Granted   | 9148430       | 8/17/2011   | 42276      | 14/001699          | US | METHOD OF MANAGING USAGE RIGHTS IN A SHARE GROUP OF SERVERS                         |
| 83422622     | Published |               | 2/2/2011    |            | 13/982732          | US | ESTIMATING A PERFORMANCE CHARACTERISTIC OF A JOB USING A PERFORMANCE MODEL          |
| 83423128     | Granted   | 8970958       | 1/31/2011   | 3/3/2015   | 13/980472          | US | BROADBAND OPTICAL BEAM SPLITTERS                                                    |
| 83439060     | Published |               | 6/9/2011    |            | 13/981903          | US | REGULATING POWER CONSUMPTION OF A MASS STORAGE SYSTEM                               |
| 83439075     | Granted   | 9063835       | 6/2/2011    | 42178      | 13/981907          | US | MANAGING PROCESSING OF USER REQUESTS AND DATA REPLICATION FOR A MASS STORAGE SYSTEM |
| 83442160     | Published |               | 3/3/2011    |            | 13/980350          | US | RECORDS MANAGEMENT SYSTEM                                                           |
| 83498533     | Published |               | 2/18/2011   |            | 13/982706          | US | GENERATING TEST DATA                                                                |
| 83498562     | Published |               | 3/11/2011   |            | 13/984336          | US | Sampling Network Traffic                                                            |
| 83501095     | Published |               | 2/23/2011   |            | 13/985808          | US | METHOD AND APPARATUS FOR MANAGING DEVICES                                           |
| 83505261     | Granted   | 8755656       | 8/7/2013    | 41807      | 13/961171          | US | PROXIMITY FREE SPACE OPTICAL INTERCONNECT                                           |
| 83507399     | Published |               | 3/1/2012    |            | 14/003020          | US | METHODS AND SYSTEMS FOR FULL PATTERN MATCHING IN HARDWARE                           |

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| 83507642     | Granted     | 9036472       | 3/15/2011   | 42143      | 13/984547          | US | Network Switching Device for Quantifying Available Service Level Capacity of a Network For Projected Network Traffic                                |
| 83515797     | Allowed     |               | 2/1/2011    |            | 13/982672          | US | NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                                                                                             |
| 83516169     | Published   |               | 10/25/2013  |            | 14/063918          | US | Method And System For Hierarchical Forecasting                                                                                                      |
| 83518888     | Published   |               | 5/2/2011    |            | 13/985265          | US | Digital Signatures                                                                                                                                  |
| 83543188     | Allowed     |               | 3/3/2011    |            | 14/001710          | US | TESTING INTEGRATED BUSINESS SYSTEMS                                                                                                                 |
| 83543319     | Granted     | 9104810       | 3/8/2011    | 42227      | 14/001723          | US | CREATING A TEST CASE                                                                                                                                |
| 83543629     | Published   |               | 4/7/2011    |            | 13/984608          | US | SYSTEMS AND METHODS FOR DETERMINING A POWER PHASE AND/OR A PHASE ROTATION                                                                           |
| 83543637     | Published   |               | 4/13/2011   |            | 14/009771          | US | INPUT/OUTPUT PROCESSING                                                                                                                             |
| 83546348     | Published   |               | 2/10/2011   |            | 13/984738          | US | GRATING-BASED POLARIZERS AND OPTICAL ISOLATORS                                                                                                      |
| 83553808     | Published   |               | 2/16/2011   |            | 13/985110          | US | POPULATION CATEGORY HIERARCHIES                                                                                                                     |
| 83584479     | Granted     | D705232       | 10/29/2013  | 41779      | 29/471212          | US | Extended Bezel for a Blade Server                                                                                                                   |
| 83584490     | Granted     | D705233       | 10/29/2013  | 5/20/2014  | 29/471213          | US | Extended Bezel for a Blade Server                                                                                                                   |
| 83584531     | Published   |               | 3/15/2011   |            | 14/001861          | US | USABILITY TESTING                                                                                                                                   |
| 83588887     | Published   |               | 5/6/2011    |            | 14/003510          | US | Computing Device Protector                                                                                                                          |
| 83593356     | Published   |               | 6/2/2011    |            | 14/000966          | US | NETWORK VIRTUALIZATION                                                                                                                              |
| 83598159     | Published   |               | 3/15/2011   |            | 14/003126          | US | ESTIMATING COSTS OF BEHAVIORAL TARGETING                                                                                                            |
| 83598162     | Published   |               | 5/13/2011   |            | 14/003255          | US | AUTOMATED NEGOTIATION                                                                                                                               |
| 83598170     | Published   |               | 4/6/2011    |            | 14/003264          | US | AUTOMATED NEGOTIATION                                                                                                                               |
| 83602930     | Application |               | 1/21/2014   |            | 14/160030          | US | PROVIDING FILE METADATA QUERIES FOR FILE SYSTEMS USING RESTful APIs                                                                                 |
| 83618376     | Published   |               | 5/25/2011   |            | 14/005279          | US | BLADE COMPUTER SYSTEM                                                                                                                               |
| 83618657     | Published   |               | 9/18/2013   |            | 14/030930          | US | MANAGEMENT OF STORAGE READ REQUESTS                                                                                                                 |
| 83623279     | Granted     | 8949693       | 3/4/2011    | 42038      | 14/002790          | US | ANTIPODAL-MAPPING-BASED ENCODERS AND DECODERS                                                                                                       |
| 83629022     | Published   |               | 10/14/2013  |            | 14/053241          | US | DIAGNOSING CONNECTIVITY IN A NETWORK                                                                                                                |
| 83629033     | Published   |               | 6/27/2011   |            | 14/006033          | US | COOLING A SECONDARY COMPONENT BY DIVERTING AIRFLOW USING AN AIR CHANNEL ASSOCIATED WITH A THERMAL DISSIPATION DEVICE THAT COOLS A PRIMARY COMPONENT |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 83629039     | Published   |               | 10/11/2013  |            | 14/052082          | US | PROVISIONING A NETWORK FOR NETWORK TRAFFIC                                                                                                          |
| 83634652     | Published   |               | 1/14/2014   |            | 14/154563          | US | PERFORMANCE OF TASKS WITHIN ORGANIZATIONS                                                                                                           |
| 83663162     | Published   |               | 5/31/2011   |            | 14/003275          | US | AUTOMATED NEGOTIATION                                                                                                                               |
| 83663174     | Published   |               | 4/7/2011    |            | 14/004512          | US | GRAPHICAL OBJECT CLASSIFICATION                                                                                                                     |
| 83663191     | Published   |               | 6/8/2011    |            | 14/122357          | US | Sentiment Trend Visualization Relating to an Event Occurring in a Particular Geographic Region                                                      |
| 83663213     | Published   |               | 6/8/2011    |            | 14/003163          | US | Determining and Visualizing Social Media Expressed Sentiment                                                                                        |
| 83663291     | Granted     | 9083653       | 10/21/2013  | 42199      | 14/058939          | US | Automated Cloud Set Up                                                                                                                              |
| 83663296     | Published   |               | 10/31/2013  |            | 14/069113          | US | Building a Realized Topology with a Binding Document                                                                                                |

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| 83680552     | Published   |               | 4/11/2011   |            | 14/004429          | US | PERFORMING A TASK IN A SYSTEM HAVING DIFFERENT<br>OF HARDWARE RESOURCES                                |
| 83680972     | Published   |               | 4/6/2011    |            | 14/009365          | US | IDENTIFYING SIMILARITY                                                                                 |
| 83681482     | Allowed     |               | 3/21/2011   |            | 14/006002          | US | DATA BACKUP PRIORITIZATION                                                                             |
| 83682166     | Published   |               | 4/29/2011   |            | 14/110333          | US | SYSTEMS AND METHODS FOR IN-MEMORY PROCESSING OF<br>EVENTS                                              |
| 83691795     | Granted     | 8933431       | 3/29/2011   | 42017      | 14/006719          | US | DUAL-PLANE MEMORY ARRAY                                                                                |
| 83693035     | Granted     | 8780613       | 10/8/2013   | 41835      | 14/048521          | US | READING A MEMORY ELEMENT WITHIN A CROSSBAR ARRAY                                                       |
| 83694488     | Allowed     |               | 5/19/2011   |            | 14/113957          | US | Error Control Coding                                                                                   |
| 83696796     | Published   |               | 5/20/2011   |            | 14/116167          | US | DATA SHARING AGREEMENTS                                                                                |
| 83696864     | Published   |               | 6/6/2011    |            | 14/115269          | US | CROSS-PROTOCOL LOCKING WITH A FILE SYSTEM                                                              |
| 83698803     | Published   |               | 4/19/2012   |            | 14/232002          | US | File Lock Preservation                                                                                 |
| 83698845     | Allowed     |               | 7/18/2011   |            | 14/110445          | US | Optical Interconnect                                                                                   |
| 83699243     | Published   |               | 7/1/2011    |            | 14/110511          | US | TRAFFIC FORWARDING IN A POINT MULTI-POINT LINK                                                         |
| 83700385     | Allowed     |               | 5/11/2011   |            | 14/110398          | US | AGGREGATION USING A LINK SELECTOR DATA TABLE                                                           |
| 83701126     | Published   |               | 10/14/2011  |            | 14/233742          | US | Varying a Characteristic of a Job Profile Relating to Map and<br>Reduce Tasks According to a Data Size |
| 83701896     | Published   |               | 2/8/2012    |            | 14/130871          | US | USING A VIRTUAL BOOT DEVICE TO ACCESS A SYSTEM<br>RECOVERY IMAGE                                       |
| 83712199     | Published   |               | 10/25/2013  |            | 14/063034          | US | TRANSITION BETWEEN STATES IN A PROCESSOR                                                               |
| 83712725     | Application |               | 11/5/2013   |            | 14/071903          | US | Method And System For Effecting Payment By Checks<br>Through The Use Of Image Replacement Documents    |
| 83713435     | Published   |               | 5/25/2011   |            | 14/112644          | US | NETWORK ACCESS MANAGEMENT BASED ON SESSION<br>INFORMATION                                              |
| 83714223     | Allowed     |               | 5/31/2011   |            | 14/116000          | US | IMPLEMENTATION OF NETWORK DEVICE COMPONENTS IN<br>NETWORK DEVICES                                      |
| 83718863     | Published   |               | 11/7/2013   |            | 14/074454          | US | APPLICATION SECURITY TESTING                                                                           |
| 83721258     | Published   |               | 6/3/2011    |            | 14/122161          | US | Server Consolidation                                                                                   |
| 83721473     | Published   |               | 5/31/2011   |            | 14/118520          | US | RATING ITEMS                                                                                           |
| 83731643     | Published   |               | 9/21/2011   |            | 14/130947          | US | ESTIMATING A PERFORMANCE PARAMETER OF A JOB<br>HAVING MAP AND REDUCE TASKS AFTER A FAILURE             |
| 83733008     | Published   |               | 8/8/2011    |            | 14/124794          | US | SAS EXPANDER                                                                                           |
| 83733023     | Published   |               | 8/8/2011    |            | 14/124817          | US | FABRIC CHIP HAVING A PORT RESOLUTION MODULE                                                            |
| 83733355     | Published   |               | 8/26/2011   |            | 14/237096          | US | Fabric Chip Having Trunked Links                                                                       |
| 83735433     | Published   |               | 6/28/2011   |            | 14/126732          | US | MANAGING ACCESS TO A NETWORK                                                                           |
| 83738422     | Application |               | 7/29/2011   |            | 14/131805          | US | SHIFTABLE MEMORY                                                                                       |
| 83748040     | Published   |               | 1/31/2014   |            | 14/170404          | US | SYSTEMS AND METHODS FOR DISTRIBUTED RULE-BASED<br>CORRELATION OF EVENTS                                |
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| 83766027     | Published   |               | 10/31/2011  |            | 14/351258          | US | IMPLEMENTING AN ENERGY PROPORTIONAL NETWORK ARCHITECTURE FROM DESIRED NETWORK CRITERIA                                            |
| 83768013     | Granted     | 9128631       | 6/29/2011   | 42255      | 14/125488          | US | STORAGE ENCLOSURE BRIDGE DETECTION                                                                                                |
| 83769035     | Published   |               | 7/27/2011   |            | 14/233121          | US | Efficient Data-Storage Devices that Include Memory Element Characterized by Potentially Large Switching Latencies                 |
| 83769047     | Published   |               | 6/29/2011   |            | 14/126145          | US | Application Migration with Dynamic Operating System Containers                                                                    |
| 83769101     | Published   |               | 7/11/2011   |            | 14/131446          | US | VIRTUAL MACHINE PLACEMENT                                                                                                         |
| 83775467     | Application |               | 7/6/2011    |            | 14/126840          | US | METHOD AND SYSTEM FOR AN IMPROVED I/O REQUEST QUALITY OF SERVICE ACROSS MULTIPLE HOST I/O PORTS                                   |
| 83776077     | Application |               | 7/29/2011   |            | 14/234334          | US | CREDENTIAL VALIDATION                                                                                                             |
| 83776696     | Published   |               | 2/24/2014   |            | 14/188099          | US | DISPLAYING VISUAL ANALYTICS OF ENTITY DATA                                                                                        |
| 83777585     | Application |               | 1/31/2014   |            | 14/170321          | US | Extracting Log Files From Storage Devices                                                                                         |
| 83778081     | Published   |               | 7/12/2011   |            | 14/130758          | US | TRACING OPERATIONS IN A CLOUD SYSTEM                                                                                              |
| 83778742     | Published   |               | 7/1/2011    |            | 14/129459          | US | METHOD OF AND SYSTEM FOR MANAGING COMPUTING RESOURCES                                                                             |
| 83781210     | Application |               | 1/28/2014   |            | 14/165947          | US | CACHE AND METHOD FOR CACHE BYPASS FUNCTIONALITY                                                                                   |
| 83782770     | Published   |               | 12/15/2011  |            | 14/233310          | US | RESET VECTORS FOR BOOT INSTRUCTIONS                                                                                               |
| 83782775     | Published   |               | 12/15/2011  |            | 14/233321          | US | SECURITY PARAMETER ZEROIZATION                                                                                                    |
| 83782959     | Published   |               | 10/25/2011  |            | 14/232416          | US | DEVICE AUTHENTICATION                                                                                                             |
| 83784095     | Published   |               | 8/25/2011   |            | 14/131536          | US | RECOMMENDING A NEXT STEP TO TAKE IN A CASE                                                                                        |
| 83784127     | Published   |               | 10/20/2011  |            | 14/239885          | US | SYSTEMS AND METHODS FOR EVALUATION OF EVENTS BASED ON A REFERENCE BASELINE ACCORDING TO TEMPORAL POSITION IN A SEQUENCE OF EVENTS |
| 83784175     | Application |               | 1/6/2012    |            | 14/232229          | US | REQUESTED AND ALLOWED CRYPTOGRAPHIC OPERATIONS COMPARISON                                                                         |
| 83786450     | Published   |               | 7/14/2011   |            | 14/232521          | US | MEMRISTORS HAVING MIXED OXIDE PHASES                                                                                              |
| 83786534     | Published   |               | 7/22/2011   |            | 14/232808          | US | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                                                           |
| 83786674     | Granted     | D725593       | 2/24/2014   | 42094      | 29/482921          | US | FRONT BEZEL FOR AN UNINTERRUPTIBLE POWER SYSTEMS (UPS) TOWER                                                                      |
| 83786722     | Published   |               | 12/13/2011  |            | 14/235793          | US | STORAGE CONTROLLER WITH HOST COLLABORATION FOR INITIALIZATION OF A LOGICAL VOLUME                                                 |
| 83787461     | Granted     | D719912       | 2/28/2014   | 41996      | 29/483568          | US | Front Bezel for an Uninterruptible Power systems (UPS) Rack and Tower                                                             |
| 83787473     | Granted     | 9025496       | 1/21/2014   | 42129      | 14/159531          | US | Parallely Coupled Stackable Network Switching Device                                                                              |
| 83788571     | Published   |               | 10/25/2011  |            | 14/233407          | US | DISTRIBUTED MANAGEMENT                                                                                                            |
| 83789070     | Application |               | 3/17/2014   |            | 14/215949          | US | SYSTEM AND METHOD FOR EXECUTING QUERIES                                                                                           |



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| 83789075     | Published   |               | 8/24/2012   |            | 14/237280          | US | MULTIDIMENSION COLUMN-BASED PARTITIONING AND STORAGE                                 |
| 83789823     | Application |               | 8/24/2012   |            | 14/237192          | US | MULTIDIMENSION CLUSTERS FOR DATA PARTITIONING                                        |
| 83793364     | Published   |               | 1/26/2012   |            | 14/359261          | US | CLUSTERING EVENT DATA BY MULTIPLE TIME DIMENSIONS                                    |
| 83798012     | Published   |               | 9/28/2011   |            | 14/238519          | US | MANAGING PACKET FLOW IN A SWITCH FABRIC                                              |
| 83798756     | Published   |               | 8/31/2011   |            | 14/235112          | US | TIERED DEEP PACKET INSPECTION IN NETWORK DEVICES                                     |
| 83799689     | Published   |               | 7/31/2011   |            | 14/235393          | US | INCIDENT HANDLING                                                                    |
| 83800116     | Published   |               | 8/31/2011   |            | 14/236122          | US | PROVIDING APPLICATION CONTEXT FOR A CONVERSATION                                     |
| 83807347     | Published   |               | 8/3/2011    |            | 14/236822          | US | NITRIDE-BASED MEMRISTORS                                                             |
| 83807639     | Allowed     |               | 2/18/2014   |            | 29/482442          | US | Multi-Sectional Door for a Flexback Server                                           |
| 83814448     | Published   |               | 9/30/2011   |            | 14/240363          | US | METHOD AND APPARATUS FOR MAINTAINING WIRELESS NETWORK DEVICES IN WIRELESS NETWORKS   |
| 83815043     | Published   |               | 10/25/2011  |            | 14/349691          | US | CONNECTOR                                                                            |
| 83816166     | Published   |               | 9/21/2011   |            | 14/342664          | US | AUTOMATED DETECTION OF A SYSTEM ANOMALY                                              |
| 83818513     | Granted     | 8917476       | 11/16/2011  | 41996      | 14/348894          | US | Operation of Tape Drives                                                             |
| 83819944     | Published   |               | 9/14/2011   |            | 14/239866          | US | Determining Risk Associated with a Determined Labor Type for Candidate Personnel     |
| 83820998     | Application |               | 8/12/2014   |            | 14/457517          | US | CLASSIFYING URLS                                                                     |
| 83822529     | Application |               | 4/30/2014   |            | 14/266238          | US | DATA STORE QUERY                                                                     |
| 83824759     | Application |               | 4/30/2014   |            | 14/265736          | US | UNIQUE IDENTIFIER FOR A TRANSACTION                                                  |
| 83825617     | Application |               | 4/29/2014   |            | 14/264334          | US | GENERATING AN INTERACTIVE VISUALIZATION OF METRICS COLLECTED FOR FUNCTIONAL ENTITIES |
| 83825681     | Application |               | 4/30/2014   |            | 14/266471          | US | NETWORK TOOL SYNCHRONIZATION                                                         |
| 83825938     | Published   |               | 10/14/2011  |            | 14/346344          | US | PREDICTING CUSTOMER SATISFACTION                                                     |
| 83832716     | Published   |               | 12/2/2011   |            | 14/241483          | US | Topic Extraction And Video Association                                               |
| 83834016     | Application |               | 6/30/2014   |            | 14/320188          | US | MANAGEMENT OF DATA OPERATIONS                                                        |
| 83835765     | Published   |               | 9/6/2011    |            | 14/342705          | US | MECHANICALLY ALIGNED OPTICAL ENGINE                                                  |
| 8383736      | Published   |               | 11/1/2011   |            | 14/350371          | US | KEYING SOLUTION                                                                      |
| 8383756      | Published   |               | 10/25/2011  |            | 14/349117          | US | DRIVE CARRIER TOUCH SENSING                                                          |
| 8383770      | Published   |               | 10/15/2011  |            | 14/349143          | US | SERVICE SUSTAINABILITY SYSTEMS AND METHODS                                           |
| 8384671      | Published   |               | 9/30/2011   |            | 14/345713          | US | EXTENDING A CONVERSATION ACROSS APPLICATIONS                                         |
| 83854743     | Published   |               | 10/27/2011  |            | 14/349113          | US | SHIFTABLE MEMORY SUPPORTING IN-MEMORY DATA STRUCTURES                                |
| 83857293     | Application |               | 3/28/2014   |            | 14/229301          | US | PROCESSING A METRIC OF A COMPONENT OF A SOFTWARE-DEFINED NETWORK                     |
| 83858318     | Published   |               | 10/21/2011  |            | 14/345210          | US | GRATING COUPLERS WITH DEEP-GROOVE NON-UNIFORM GRATINGS                               |
| 83862120     | Published   |               | 10/28/2011  |            | 14/345594          | US | METAL-INSULATOR PHASE TRANSITION FLIP-FLOP                                           |
| 83862179     | Granted     | 8937981       | 11/1/2011   | 1/20/2015  | 14/345379          | US | DIRECT MODULATED LASER                                                               |

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| 83862426     | Published   |               | 10/27/2011  |            | 14/353944 US       | US | GENERATING A VISUAL REPRESENTATION                                                                     |
| 83863058     | Published   |               | 11/4/2011   |            | 14/346554 US       | US | DECODER CIRCUITS HAVING METAL-INSULATOR-METAL THRESHOLD SWITCHES                                       |
| 83863425     | Published   |               | 12/20/2011  |            | 14/347282 US       | US | WIRELESS ACCESS POINT ALTERNATE SETTINGS                                                               |
| 83873835     | Published   |               | 10/25/2011  |            | 14/349687 US       | US | DRIVE CARRIER SUBSTRATE                                                                                |
| 83874136     | Published   |               | 10/7/2011   |            | 14/347958 US       | US | Generating A Non-Deterministic Model of a Process for Goal                                             |
| 83875502     | Published   |               | 10/27/2011  |            | 14/349678 US       | US | SHIFTABLE MEMORY SUPPORTING ATOMIC OPERATION                                                           |
| 83881867     | Published   |               | 10/25/2011  |            | 14/351715 US       | US | LOAD BALANCING FOR CHARGING SYSTEM CLUSTERS                                                            |
| 83881910     | Published   |               | 10/27/2011  |            | 14/349352 US       | US | SHIFTABLE MEMORY EMPLOYING RING REGISTERS                                                              |
| 83881948     | Published   |               | 10/28/2011  |            | 14/349401 US       | US | ROW SHIFTING SHIFTABLE MEMORY                                                                          |
| 83883451     | Allowed     |               | 9/25/2012   |            | 14/353873 US       | US | SYSTEMS AND METHODS FOR CALL FORWARDING TO A DEVICE BASED ON A PRIORITY LEVEL AND GEOGRAPHIC PROXIMITY |
| 83883802     | Published   |               | 10/10/2011  |            | 14/350625 US       | US | Methods And Systems For Planning Execution Of An Application In A Cloud Computing System               |
| 83927135     | Published   |               | 12/20/2011  |            | 14/352121 US       | US | DISTRIBUTED EVENT PROCESSING                                                                           |
| 83928325     | Published   |               | 10/31/2011  |            | 14/355288 US       | US | Reducing TCP Timeouts due to Incast Collapse at a Network Switch                                       |
| 83929659     | Published   |               | 12/17/2011  |            | 14/353489 US       | US | Determining Rack Position of Device                                                                    |
| 83931480     | Published   |               | 12/23/2011  |            | 14/353491 US       | US | GENERATING A CAPACITY SCHEDULE FOR A FACILITY                                                          |
| 83932086     | Allowed     |               | 12/9/2011   |            | 14/357841 US       | US | Optical Connections                                                                                    |
| 83933022     | Allowed     |               | 12/12/2011  |            | 14/357783 US       | US | MEMRISTORS AND METHODS OF FABRICATION                                                                  |
| 83933057     | Published   |               | 12/23/2011  |            | 14/353607 US       | US | MANAGING A FACILITY                                                                                    |
| 83933389     | Published   |               | 10/31/2011  |            | 14/354100 US       | US | ESTIMATION OF UNOBSERVED DEMAND                                                                        |
| 83933546     | Published   |               | 10/27/2011  |            | 14/354115 US       | US | Aligning Annotation of Fields of Documents                                                             |
| 83942972     | Application |               | 6/3/2014    |            | 14/294865 US       | US | Flexible Midplane And Architecture For A Multi-processor Computer System                               |
| 83943785     | Published   |               | 5/7/2014    |            | 14/272243 US       | US | RESTORING STABILITY TO AN UNSTABLE BUS                                                                 |
| 83948841     | Published   |               | 1/12/2012   |            | 14/364702 US       | US | INTEGRATED SUB-WAVELENGTH GRATING SYSTEM                                                               |
| 83951313     | Published   |               | 2/22/2012   |            | 14/366390 US       | US | MULTIPLEXER FOR SIGNALS ACCORDING TO DIFFERENT PROTOCOLS                                               |
| 83951485     | Granted     | 9020006       | 1/18/2012   | 42122      | 14/364746 US       | US | HIGH DENSITY LASER OPTICS                                                                              |
| 83951543     | Allowed     |               | 1/27/2012   |            | 14/365129 US       | US | Glass-Silicon Wafer-Stacked Opto-Electronic Platforms                                                  |
| 83952273     | Published   |               | 5/1/2012    |            | 14/394260 US       | US | PACKAGED MEMORY DIES THAT SHARE A CHIP SELECT LINE                                                     |
| 83952335     | Published   |               | 3/15/2012   |            | 14/369669 US       | US | Accessing And Replicating Backup Data Objects                                                          |
| 83952392     | Application |               | 9/26/2014   |            | 14/498616 US       | US | PLATFORM ERROR CORRECTION                                                                              |
| 83952501     | Application |               | 9/29/2014   |            | 14/499323 US       | US | IMPLEMENTING STORAGE POLICIES REGARDING USE OF MEMORY REGIONS                                          |

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| 83954837     | Application |               | 6/30/2014   |            | 14/320185          | US | GRAPHICAL REPRESENTATIONS OF A PORTFOLIO OF PROJECTS                                                       |
| 83954906     | Published   |               | 7/8/2014    |            | 14/326009          | US | CONTEXT-BASED BUSINESS PROCESS MANAGEMENT                                                                  |
| 83957794     | Application |               | 7/30/2014   |            | 14/447449          | US | Determining an Active Management Uplink                                                                    |
| 83959643     | Published   |               | 1/31/2012   |            | 14/365194          | US | MONOLITHICALLY INTEGRATED, SELF-ALIGNING, OPTICAL FIBER FERRULE                                            |
| 83959958     | Published   |               | 1/31/2012   |            | 14/371509          | US | APPARATUS FOR USE IN OPTOELECTRONICS                                                                       |
| 83963511     | Published   |               | 1/20/2012   |            | 14/373452          | US | STORAGE PROVISIONING NEGOTIATION                                                                           |
| 83964318     | Published   |               | 1/25/2012   |            | 14/363537          | US | STORAGE SYSTEM DEVICE MANAGEMENT                                                                           |
| 83965904     | Published   |               | 6/3/2014    |            | 14/362566          | US | BOOTING A SERVER USING A REMOTE READ-ONLY MEMORY IMAGE                                                     |
| 83965935     | Published   |               | 1/31/2012   |            | 14/362959          | US | CONNECTOR INDICIA                                                                                          |
| 83965952     | Application |               | 7/28/2014   |            | 14/444742          | US | Storage Unit Priority Based on Configuration Information                                                   |
| 83966579     | Published   |               | 1/25/2012   |            | 14/363462          | US | METHOD AND SYSTEM FOR DIFFERENTIAL CHARGING                                                                |
| 83969756     | Application |               | 3/30/2012   |            | 14/371665          | US | AUTHORIZATION CACHE                                                                                        |
| 83972230     | Published   |               | 2/6/2012    |            | 14/364486          | US | De-Duplication                                                                                             |
| 83972808     | Published   |               | 2/2/2012    |            | 14/364440          | US | SYSTEMS AND METHODS FOR DATA CHUNK DEDUPPLICATION                                                          |
| 83973117     | Published   |               | 3/15/2012   |            | 14/373848          | US | REGULATING A REPLICATION OPERATION                                                                         |
| 83974293     | Published   |               | 1/30/2012   |            | 14/365181          | US | ESTABLISHING CONNECTIVITY OF MODULAR NODES IN A PRE-BOOT ENVIRONMENT                                       |
|              |             |               |             |            |                    |    |                                                                                                            |
| 83974314     | Published   |               | 1/31/2012   |            | 14/365191          | US | SINGLE AND DOUBLE CHIP SPARE                                                                               |
| 83977147     | Published   |               | 7/3/2014    |            | 14/323614          | US | Multi-chip Socket                                                                                          |
| 83977153     | Published   |               | 7/3/2014    |            | 14/323619          | US | Multi-chip Socket                                                                                          |
| 83977176     | Published   |               | 12/21/2011  |            | 14/366786          | US | PROPER INSTALLATION DETERMINATION BASED ON RFID                                                            |
| 83980599     | Allowed     |               | 2/24/2012   |            | 14/367442          | US | OPTICAL BLIND-MATE CONNECTOR                                                                               |
| 83984220     | Allowed     |               | 1/6/2012    |            | 14/370165          | US | CONNECTOR MODULES HAVING OPTICAL CONNECTORS MOVEABLE BETWEEN A RETRACTED POSITION AND AN EXTENDED POSITION |
| 83985643     | Published   |               | 2/21/2012   |            | 14/369760          | US | MAINTAINING SYSTEM FIRMWARE IMAGES REMOTELY USING A DISTRIBUTE FILE SYSTEM PROTOCOL                        |
| 83986994     | Application |               | 1/31/2012   |            | 14/370758          | US | REDUCING CURRENT HARMONICS AT LIGHT LOADS                                                                  |
| 83987166     | Published   |               | 1/23/2012   |            | 14/373595          | US | IDENTIFYING A POLLING COMMUNICATION PATTERN                                                                |
| 83988362     | Published   |               | 4/24/2012   |            | 14/374804          | US | IDENTIFYING NETWORK COMMUNICATION PATTERNS                                                                 |
| 83988396     | Published   |               | 4/25/2012   |            | 14/374808          | US | NETWORK MANAGEMENT                                                                                         |
| 83990818     | Published   |               | 4/20/2012   |            | 14/371138          | US | Unified User Profiles                                                                                      |
| 83991333     | Published   |               | 1/26/2012   |            | 14/373560          | US | IDENTIFYING A PUSH COMMUNICATION PATTERN                                                                   |
| 83991373     | Published   |               | 1/30/2012   |            | 14/372514          | US | REDUNDANT NON-LOOPING PATHS                                                                                |
| 83991402     | Published   |               | 4/25/2012   |            | 14/372541          | US | INTER DOMAIN LINK FOR FIBRE CHANNEL                                                                        |

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| 83991414     | Published   |               | 4/26/2012   |            | 14/372546 US       | US | MULTICAST ROUTING PATH CHECK                                          |
| 83991637     | Published   |               | 2/27/2012   |            | 14/374831 US       | US | METHOD AND SYSTEM FOR VEHICLE PERSONALIZATION                         |
| 83991760     | Published   |               | 1/31/2012   |            | 14/374249 US       | US | IDENTIFICATION OF A FAILED CODE CHANGE                                |
| 83992327     | Published   |               | 3/16/2012   |            | 14/373478 US       | US | VARIED MULTILAYER MEMRISTIVE DEVICE                                   |
| 83992375     | Published   |               | 4/18/2012   |            | 14/373437 US       | US | FLEXIBLE CIRCUIT CABLE WITH FLOATING CONTACT                          |
| 83992436     | Allowed     |               | 4/25/2012   |            | 14/373417 US       | US | ANALYZING LIGHT BY MODE INTERFERENCE                                  |
| 83992456     | Published   |               | 4/26/2012   |            | 14/373400 US       | US | OPTICAL SLAB                                                          |
| 83992739     | Application |               | 1/31/2013   |            | 14/761550 US       | US | DEFINING A DESIGN PLAN                                                |
| 83992779     | Published   |               | 4/25/2012   |            | 14/374834 US       | US | FILE TRANSFER USING XML                                               |
| 83992793     | Application |               | 3/13/2012   |            | 14/374797 US       | US | Submatch Extraction                                                   |
| 83992827     | Application |               | 12/3/2012   |            | 14/646113 US       | US | GENERIC RESOURCE PROVIDER FOR CLOUD SERVICE                           |
| 83993189     | Published   |               | 4/26/2012   |            | 14/374828 US       | US | RESOURCE PLANNING                                                     |
| 83995389     | Application |               | 2/28/2013   |            | 14/759704 US       | US | AN INTERFACE FOR CREATING A PLAN ARTIFACT                             |
| 83995433     | Application |               | 4/9/2012    |            | 14/375486 US       | US | CREATING AN ARCHIVAL MODEL                                            |
| 83995578     | Published   |               | 2/7/2012    |            | 14/374785 US       | US | TESTING A MOBILE APPLICATION                                          |
| 83995805     | Application |               | 3/12/2012   |            | 14/376137 US       | US | RACK COOLING SYSTEM WITH A COOLING SECTION                            |
| 83995836     | Published   |               | 4/20/2012   |            | 14/376136 US       | US | VOLTAGE REGULATOR CONTROL SYSTEM                                      |
| 83996463     | Published   |               | 4/30/2012   |            | 14/372296 US       | US | CONTROL SIGNAL BASED ON A COMMAND TAPPED BY A USER                    |
| 83998478     | Published   |               | 2/29/2012   |            | 14/381410 US       | US | NETWORK SERVICE INTERFACE ANALYSIS                                    |
| 83998868     | Published   |               | 1/30/2012   |            | 14/374776 US       | US | WORD SHIFT STATIC RANDOM ACCESS MEMORY (WS-SRAM)                      |
| 83998916     | Published   |               | 1/30/2012   |            | 14/374789 US       | US | DYNAMIC/STATIC RANDOM ACCESS MEMORY (D/SRAM)                          |
| 83999014     | Published   |               | 1/20/2012   |            | 14/372976 US       | US | MANAGING DATA ENTITIES USING COLLABORATIVE FILTERING                  |
| 84000239     | Application |               | 4/27/2012   |            | 14/372874 US       | US | APPLICATION RETENTION METRICS                                         |
| 84002955     | Published   |               | 3/29/2012   |            | 14/374839 US       | US | A Conceptual Services Implementation Platform                         |
| 84008033     | Published   |               | 7/30/2014   |            | 14/446525 US       | US | COMPOSITE WAFER INCLUDING A MOULDED WAFER AND A SECOND WAFER          |
| 84016721     | Published   |               | 2/29/2012   |            | 14/377919 US       | US | INFORMATION TRANSMISSION FROM WIRELESS ACCESS POINT                   |
| 84017573     | Published   |               | 8/30/2012   |            | 14/377927 US       | US | SECURE NETWORK DATA                                                   |
| 84017588     | Published   |               | 4/27/2012   |            | 14/377928 US       | US | HOME NETWORK PACKET DELIVERY                                          |
| 84017625     | Published   |               | 2/22/2012   |            | 14/378971 US       | US | HIDING LOGICAL PROCESSORS FROM AN OPERATING SYSTEM ON A COMPUTER      |
| 84022087     | Published   |               | 2/16/2012   |            | 14/378661 US       | US | RADIO RESOURCE MANAGEMENT                                             |
| 84022818     | Published   |               | 4/24/2012   |            | 14/379662 US       | US | OPTICAL DATA INTERFACE WITH ELECTRICAL FORWARDED CLOCK                |
| 84026920     | Published   |               | 4/25/2012   |            | 14/379638 US       | US | OPEN-GAIN TRANS-IMPEDANCE AMPLIFIER WITH PROGRAMMABLE INPUT IMPEDANCE |

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| 84027706     | Allowed     |               | 4/25/2012   |            | 14/386183          | US | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASER                                                        |
| 84028835     | Published   |               | 2/29/2012   |            | 14/381291          | US | Continuous Recording Multichannel Disk-based Data Logging                                               |
| 84028840     | Published   |               | 3/2/2012    |            | 14/381859          | US | Shiftable Memory Supporting Bimodal Storage                                                             |
| 84031356     | Application |               | 10/31/2014  |            | 14/529476          | US | COMMON DEPLOYMENT MODEL                                                                                 |
| 84038278     | Application |               | 8/29/2014   |            | 14/473582          | US | DETERMINING THROUGHPUT BASED ON SYSTEM BUSY TIME                                                        |
| 84038292     | Application |               | 8/27/2014   |            | 14/470837          | US | COMPUTING PLATFORM POWER CONSUMPTION LEVEL ADJUSTMENT                                                   |
| 84044280     | Application |               | 10/30/2014  |            | 29/507763          | US | Hot Plug Button with an Identifying Colored Stripe                                                      |
| 84044294     | Application |               | 10/30/2014  |            | 29/507765          | US | HARD DRIVE CARRIER                                                                                      |
| 84044306     | Application |               | 10/30/2014  |            | 29/507762          | US | HANDLE FOR A DRAWER                                                                                     |
| 84044318     | Application |               | 10/30/2014  |            | 29/507764          | US | HANDLE FOR A CARRIER                                                                                    |
| 84046860     | Published   |               | 3/30/2012   |            | 14/388177          | US | ASSOCIATING AN APPLICATION WITH AN APPLICATION FILE                                                     |
| 84047389     | Application |               | 3/30/2012   |            | 14/386792          | US | LICENSE MANAGEMENT OF FIRMWARE-CONTROLLABLE FEATURES IN COMPUTER SYSTEMS                                |
| 84052785     | Granted     | 9084187       | 9/30/2014   | 42199      | 14/502450          | US | PACKET ROUTING METHOD, PROXY SERVER AND APPARATUS                                                       |
| 84056073     | Granted     | D740846       | 11/18/2014  | 42290      | 29/509514          | US | COMPUTING DEVICE DISPLAYING GRAPHICAL USER INTERFACE FOR PROVIDING COLLABORATIVE RESOURCES (as amended) |
| 84057342     | Published   |               | 10/31/2014  |            | 14/530331          | US | PROVISION OF SERVICES OVER A COMMON DELIVERY PLATFORM SUCH AS A MOBILE TELEPHONY NETWORK                |
| 84057413     | Published   |               | 4/25/2012   |            | 14/387650          | US | ELECTRICAL/OPTICAL CONNECTOR                                                                            |
| 84060087     | Published   |               | 4/27/2012   |            | 14/387554          | US | SHIELDING A MEMORY DEVICE                                                                               |
| 84060946     | Published   |               | 4/30/2012   |            | 14/387563          | US | ADDRESS TRANSLATION GASKET                                                                              |
| 84063613     | Published   |               | 4/30/2012   |            | 14/387863          | US | CONFIGURABLE COMPUTER MEMORY                                                                            |
| 84064684     | Published   |               | 10/22/2014  |            | 14/520517          | US | Packet Processing Indication                                                                            |
| 84067646     | Published   |               | 4/30/2012   |            | 14/389910          | US | REFLECTIVE MEMORY BRIDGE FOR EXTERNAL COMPUTING NODES                                                   |
| 84068293     | Published   |               | 4/16/2012   |            | 14/390587          | US | INTEGRATED OPTICAL SUB-ASSEMBLY                                                                         |
| 84068877     | Published   |               | 4/26/2012   |            | 14/396694          | US | INPUT-OUTPUT MODULE                                                                                     |
| 84071857     | Published   |               | 4/20/2012   |            | 14/391686          | US | TESTING SYSTEM FOR AN INTEGRATED SOFTWARE SYSTEM                                                        |
| 84071969     | Published   |               | 4/23/2012   |            | 14/391689          | US | SOFTWARE DEFECT VERIFICATION                                                                            |
| 84072859     | Published   |               | 6/8/2012    |            | 14/391668          | US | TEST AND MANAGEMENT FOR CLOUD APPLICATIONS                                                              |
| 84073443     | Published   |               | 4/30/2012   |            | 14/391300          | US | FEEDBACK-BASED TRANS-IMPEDANCE AMPLIFIER WITH PROGRAMMABLE INPUT IMPEDANCE                              |
| 84073463     | Published   |               | 4/30/2012   |            | 14/391336          | US | TRANSCIEVER MODULE                                                                                      |
| 84073520     | Application |               | 4/30/2012   |            | 14/391352          | US | OPTICAL BASE LAYER                                                                                      |

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| 84073529     | Published   |               | 4/30/2012   |            | 14/391359 US       | US | SOCKET WITH ROUTED CONTACTS                                                                                                                                                 |
| 84074268     | Published   |               | 7/6/2012    |            | 14/391202 US       | US | EXPOSED GROUP OF RECIPIENTS FOR TEXT MESSAGE                                                                                                                                |
| 84074293     | Published   |               | 5/30/2012   |            | 14/395931 US       | US | SERVER PROFILE TEMPLATES                                                                                                                                                    |
| 84075973     | Published   |               | 7/27/2012   |            | 14/395951 US       | US | SYSTEMS AND METHODS FOR DETECTING A DIMM SEATING ERROR                                                                                                                      |
| 84076014     | Published   |               | 5/29/2012   |            | 14/402704 US       | US | DEVICES INCLUDING INDEPENDENTLY CONTROLLABLE ABSORPTION REGION AND MULTIPLICATION REGION                                                                                    |
|              |             |               |             |            |                    |    | ELECTRIC FIELDS                                                                                                                                                             |
| 84076111     | Published   |               | 7/25/2012   |            | 14/396419 US       | US | Avalanche Photodiodes with Defect-assisted Silicon Absorption Regions                                                                                                       |
|              |             |               |             |            |                    |    | OPTICAL ENGINE                                                                                                                                                              |
| 84076180     | Application |               | 7/26/2012   |            | 14/416312 US       | US | OPTICALLY CONNECTING A CHIP PACKAGE TO AN OPTICAL CONNECTOR                                                                                                                 |
| 84076305     | Published   |               | 7/27/2012   |            | 14/395996 US       | US | MIGRATING APPLICATIONS BETWEEN NETWORKS                                                                                                                                     |
| 84076334     | Published   |               | 7/20/2012   |            | 14/394544 US       | US | PROBLEM ANALYSIS AND PRIORITY DETERMINATION BASED ON FUZZY EXPERT SYSTEMS                                                                                                   |
| 84077542     | Application |               | 7/20/2012   |            | 14/395445 US       | US | PROVIDING AGREEMENT INFORMATION TO ALLOW ACCESS BY A CLIENT DEVICE OF SELECTED EQUIPMENT FROM AMONG MULTIPLE EQUIPMENT                                                      |
| 84077571     | Published   |               | 7/30/2012   |            | 14/391824 US       | US | DEVICE TO PERFORM SERVICE CONTRACT ANALYSIS                                                                                                                                 |
| 84077579     | Published   |               | 7/30/2012   |            | 14/395437 US       | US | IMPLEMENTING A TRANSITION PROTOCOL IN WHICH A FIRST RULE SET FOR ROUTING PACKETS RECEIVED BY A GROUP OF SWITCHES DURING A FIRST TIME PERIOD IS UPDATED TO A SECOND RULE SET |
| 84077631     | Application |               | 7/31/2012   |            | 14/391839 US       | US | POLICY-BASED SCALING OF NETWORK RESOURCES                                                                                                                                   |
|              |             |               |             |            |                    |    | LIST SORT STATIC RANDOM ACCESS MEMORY                                                                                                                                       |
| 84077653     | Published   |               | 7/20/2012   |            | 14/395684 US       | US | Fiber Connector Assembly                                                                                                                                                    |
| 84077882     | Published   |               | 7/10/2012   |            | 14/396331 US       | US | FIELD SELECTION FOR PATTERN DISCOVERY                                                                                                                                       |
| 84078673     | Application |               | 5/24/2012   |            | 14/396055 US       | US | PATTERN MINING BASED ON OCCUPANCY                                                                                                                                           |
| 84079488     | Published   |               | 5/30/2012   |            | 14/398003 US       | US | MERGING DATA FROM A SOURCE LOCATION INTO A TARGET LOCATION                                                                                                                  |
| 84079569     | Published   |               | 5/15/2012   |            | 14/398213 US       | US | MANAGING AN ANALYTIC FUNCTION TO BE PERFORMED ON DATA STORED IN AN INPUT BLOCK                                                                                              |
| 84079629     | Published   |               | 6/1/2012    |            | 14/398249 US       | US | Method And Apparatus For Processing Inbound And Outbound Quanta Of Data                                                                                                     |
| 84079652     | Published   |               | 6/4/2012    |            | 14/398269 US       | US | UNIMAP STORAGE SPACE                                                                                                                                                        |
| 84082448     | Published   |               | 10/15/2014  |            | 14/515312 US       | US | DETERMINING A PRIMARY WIRELESS ACCESS POINT (WAP) OBJECT FROM COVERAGE PREDICTIONS FOR TRIAL WAP CONFIGURATIONS                                                             |
| 84082709     | Application |               | 9/26/2014   |            | 14/498998 US       | US |                                                                                                                                                                             |
| 84084111     | Published   |               | 4/30/2012   |            | 14/396733 US       | US |                                                                                                                                                                             |

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| 84086487     | Published    |               | 11/14/2014  |            | 14/542098 US       | US | SEMANTICS GRAPHS FOR ENTERPRISE COMMUNICATION NETWORKS                                |
| 84088685     | Published    |               | 4/30/2012   |            | 14/397705 US       | US | NOTIFICATION BASED ON AN EVENT IDENTIFIED FROM VIBRATION DATA                         |
| 84089321     | Published    |               | 5/9/2012    |            | 14/396600 US       | US | APPARATUS AND METHOD FOR SELECTING MEMORY OUTSIDE A MEMORY ARRAY                      |
| 84089439     | Published    |               | 6/7/2012    |            | 14/397425 US       | US | Multi-Tenant Network Provisioning                                                     |
| 84089444     | Published    |               | 6/19/2012   |            | 14/397429 US       | US | An Iterative Optimization Method for Site Selection in Global Load Balance            |
| 84092613     | Published    |               | 6/8/2012    |            | 14/402653 US       | US | CLOUD APPLICATION DEPLOYMENT                                                          |
| 84095078     | Application  |               | 11/18/2014  |            | 29/509506 US       | US | CABINET                                                                               |
| 84095601     | Granted      | D732041       | 11/18/2014  | 42171      | 29/509511 US       | US | ENCLOSURE                                                                             |
| 84096695     | Application  |               | 10/30/2014  |            | 29/507767 US       | US | CARRIER                                                                               |
| 84096718     | Application  |               | 10/30/2014  |            | 29/507768 US       | US | CARRIER                                                                               |
| 84100737     | Published    |               | 6/30/2012   |            | 14/400601 US       | US | SYSTEM AND METHOD FOR VIRTUAL REPLICATION OF A MOBILE PHONE                           |
| 84100836     | Published    |               | 5/11/2012   |            | 14/398866 US       | US | SERVER SELECTION                                                                      |
| 84103109     | Allowed      |               | 12/8/2014   |            | 14/563327 US       | US | EXECUTION OF END-TO-END PROCESSES ACROSS APPLICATIONS                                 |
| 84103161     | Published    |               | 6/15/2012   |            | 14/400366 US       | US | COMMUNICATING DATA ASSOCIATED WITH DIFFERENT PERSONAS OF A USER                       |
| 84103284     | Published    |               | 7/31/2012   |            | 14/400373 US       | US | VIRTUAL MACHINE DATA PACKET ENCAPSULATION AND DECAPSULATION                           |
| 84105891     | Application  |               | 5/22/2012   |            | 14/401832 US       | US | ALTERNATING POWER SOURCES TO MANAGE INPUT POWER IN A CONVERTER                        |
| 84106324     | Application  |               | 6/29/2012   |            | 14/411055 US       | US | RE-VERIFICATION OF A DEVICE                                                           |
| 84106336     | Application  |               | 6/29/2012   |            | 14/411090 US       | US | GENERATION OF ACCESS POINT CONFIGURATION CHANGE BASED ON A GENERATED COVERAGE MONITOR |
| 84110970     | Published    |               | 7/27/2012   |            | 14/415268 US       | US | DYNAMIC SENSE CIRCUITRY                                                               |
| 84111004     | Published    |               | 7/27/2012   |            | 14/416292 US       | US | STORING MEMORY WITH NEGATIVE DIFFERENTIAL RESISTANCE MATERIAL                         |
| 84111545     | Published    |               | 12/8/2014   |            | 14/563331 US       | US | EXECUTION OF A WORKFLOW THAT INVOLVES APPLICATIONS OR SERVICES OF DATA CENTERS        |
| 84111908     | Application  |               | 4/16/2015   |            | 14/688888 US       | US | Refresh Flow Entry                                                                    |
| 84112930     | Published    |               | 7/30/2012   |            | 14/417819 US       | US | OPTICAL WAVEGUIDE                                                                     |
| 84113159     | Application  |               | 1/23/2015   |            | 14/604256 US       | US | Worker Task Assignment Based on Correlation and Capacity Information                  |
| 84113163     | Application  |               | 2/19/2015   |            | 14/626317 US       | US | FAN GUARD                                                                             |
| 84113720     | Application  |               | 1/28/2015   |            | 14/607247 US       | US | DETECTING FLOW ANOMALIES                                                              |
| 84113798     | Acknowledged |               |             |            |                    | US | MARKETPLACE FOR CLOUD SERVICE PROVIDERS                                               |

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| 84115667     | Application |               | 4/30/2015   |            | 14/700972          | US | APPARATUS HAVING FIRST AND SECOND SWITCHING MATERIALS                                                 |
| 84115781     | Published   |               | 12/11/2014  |            | 14/567513          | US | PRIORITIZED OPTICAL ARBITRATION SYSTEMS AND METHODS                                                   |
| 84116623     | Published   |               | 6/4/2012    |            | 14/405563          | US | USER-DEFINED LOADING OF DATA ONTO A DATABASE                                                          |
| 84116998     | Published   |               | 6/22/2012   |            | 14/406564          | US | OPTIMAL ASSIGNMENT OF VIRTUAL MACHINES AND VIRTUAL DISKS USING MULTIARY TREE                          |
| 84117006     | Published   |               | 12/8/2014   |            | 14/563552          | US | FULFILLING A REQUEST BASED ON CATALOG AGGREGATION AND ORCHESTRATED EXECUTION OF AN END-TO-END PROCESS |
| 84118364     | Application |               | 9/27/2012   |            | 14/410660          | US | REPLACING VIRTUAL FILE SYSTEM DATA STRUCTURES DELETED BY A FORCED UNMOUNT                             |
| 84118616     | Application |               | 7/3/2012    |            | 14/406683          | US | MANAGING A HYBRID CLOUD SERVICE                                                                       |
| 84119016     | Published   |               | 8/13/2012   |            | 14/406792          | US | TRANS-IMPEDANCE AMPLIFIERS (TIA) THERMALLY ISOLATED FROM OPTICAL MODULES                              |
| 84119359     | Allowed     |               | 12/18/2014  |            | 14/575441          | US | DIRECT MODULATED LASER                                                                                |
| 84120648     | Published   |               | 8/31/2012   |            | 14/424601          | US | NETWORK SYSTEM FOR IMPLEMENTING A CLOUD PLATFORM                                                      |
| 84121738     | Published   |               | 7/31/2012   |            | 14/408838          | US | MONITORING FOR MANAGED SERVICES                                                                       |
| 84121936     | Published   |               | 7/6/2012    |            | 14/408673          | US | MANAGEMENT OF AIRFLOW PROVISIONING TO MEET A COOLING INFLUENCE REDUNDANCY LEVEL                       |
| 84123810     | Application |               | 10/22/2012  |            | 14/410629          | US | PERFORMING REFRESH OF A MEMORY DEVICE IN RESPONSE TO ACCESS OF DATA                                   |
| 84124111     | Published   |               | 12/22/2014  |            | 14/579917          | US | TELECENTRIC OPTICAL ASSEMBLY                                                                          |
| 84124749     | Application |               | 1/30/2013   |            | 14/438624          | US | FAILOVER IN RESPONSE TO FAILURE OF A PORT                                                             |
| 84126210     | Application |               | 7/9/2012    |            | 14/413417          | US | SITE MODEL SELECTION FOR A WIRELESS ACCESS POINT                                                      |
| 84126774     | Application |               | 1/30/2013   |            | 14/442450          | US | WRITING DATA TO A TAPE                                                                                |
| 84126791     | Application |               | 1/31/2013   |            | 14/443548          | US | MAGNETIC TAPE PROCESSING                                                                              |
| 84136983     | Application |               | 7/31/2012   |            | 14/418881          | US | NETWORK TRAFFIC PROCESSING SYSTEM                                                                     |
| 84137299     | Application |               | 10/10/2012  |            | 14/431414          | US | IDENTIFYING REPORTS TO ADDRESS NETWORK ISSUES                                                         |
| 84138275     | Published   |               | 7/30/2012   |            | 14/417224          | US | COMPLIATION SYSTEM FOR EXECUTABLE OBJECTS                                                             |
| 84138409     | Application |               | 9/27/2012   |            | 14/416266          | US | ALLOCATING WORKLOADS BASED ON AIR FLOW PRIORITY                                                       |
| 84139170     | Application |               | 7/31/2012   |            | 14/418894          | US | CONJOINT VULNERABILITY IDENTIFIERS                                                                    |
| 84139551     | To Be Filed |               | 2/28/2014   |            |                    | US | UNIBODY SOCKETS INCLUDING LATCH EXTENSIONS                                                            |
| 84139565     | Application |               | 9/28/2012   |            | 14/416076          | US | PLENUMS FOR REMOVABLE MODULES                                                                         |
| 84139967     | Application |               | 9/27/2012   |            | 14/417950          | US | CAPTURING AN APPLICATION STATE IN A CONVERSATION                                                      |
| 84139989     | Published   |               | 7/31/2012   |            | 14/418815          | US | INSTRUMENTED FILE DEPLOYMENT                                                                          |
| 84140058     | Application |               | 10/31/2012  |            | 14/415577          | US | SIGNALING EXISTENCE OF A NETWORK NODE THAT IS IN A REDUCED-POWER MODE                                 |
| 84140112     | Application |               | 10/30/2012  |            | 14/416592          | US | ANALYZING DATA WITH COMPUTER VISION                                                                   |

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| 84140193     | Published   |               | 10/26/2012  |            | 14/416610          | US | PROCESSING STREAMING DATA WITH OPEN EXECUTORS                                  |
| 84140883     | Application |               | 9/6/2012    |            | 14/414958          | US | Scalable File System                                                           |
| 84141246     | Published   |               | 10/31/2012  |            | 14/427709          | US | THERMAL STABILIZATION SHIPPING SYSTEM AND METHOD                               |
| 84141272     | Application |               | 7/31/2012   |            | 14/418863          | US | VULNERABILITY VECTOR INFORMATION ANALYSIS                                      |
| 84141864     | Published   |               | 2/10/2015   |            | 14/618602          | US | SERVER SWITCH INTEGRATION IN A VIRTUALIZED SYSTEM                              |
| 84147329     | Application |               | 42025       |            | 14/602033          | US | DISPLAY SERVER COMMUNICATIONS CHANNEL                                          |
| 84148242     | Allowed     |               | 8/13/2012   |            | 14/419019          | US | PERFORMANCE TESTS IN A CONTINUOUS DEPLOYMENT PIPELINE                          |
| 84148250     | Application |               | 8/29/2012   |            | 14/424030          | US | CONTROLLER TO DETERMINE A RISK OF THERMAL DAMAGE BASED ON CURRENT MEASUREMENTS |
| 84148304     | Application |               | 8/24/2012   |            | 14/423708          | US | DEDICATING RESOURCES OF A NETWORK PROCESSOR                                    |
| 84153343     | Published   |               | 7/31/2012   |            | 14/418927          | US | UNAUTHORIZED USER CLASSIFICATION                                               |
| 84156299     | Published   |               | 9/13/2012   |            | 14/420255          | US | POLICY DECISION POINT MANAGEMENT                                               |
| 84158942     | Published   |               | 8/28/2012   |            | 14/423913          | US | HIGH PERFORMANCE PERSISTENT MEMORY                                             |
| 84159549     | Application |               | 1/31/2013   |            | 14/429489          | US | CONTROLLED HEAT DELIVERY                                                       |
| 84160894     | Published   |               | 9/27/2012   |            | 14/426416          | US | NON-EVANESCENT HYBRID LASER                                                    |
| 84161772     | Application |               | 2/24/2015   |            | 29/518531          | US | BELZEL WITH DOCKING RECESS                                                     |
| 84161938     | Application |               | 9/21/2012   |            | 14/428686          | US | MONITOR USABLE WITH CONTINUOUS DEPLOYMENT                                      |
| 84162986     | Published   |               | 8/30/2012   |            | 14/421759          | US | ENCRYPTED DATA STORE FOR RECORDS                                               |
| 84163292     | Published   |               | 9/12/2012   |            | 14/421734          | US | VALIDATING A METADATA TREE USING A METADATA INTEGRITY VALIDATOR                |
| 84164269     | Published   |               | 9/19/2012   |            | 14/421784          | US | METADATA TREE OF A PATIENT WITH LOCKBOXES                                      |
| 84168273     | Published   |               | 8/21/2012   |            | 14/422346          | US | CONGESTION NOTIFICATION IN A NETWORK                                           |
| 84169635     | Published   |               | 3/10/2015   |            | 14/642950          | US | HIGH DENSITY LASER OPTICS                                                      |
| 84169911     | Application |               | 4/30/2015   |            | 14/701428          | US | CLINICAL QUALITY PERFORMANCE MANAGEMENT                                        |
| 84170294     | Application |               | 4/30/2015   |            | 14/701302          | US | PROJECTION DEVICE ACCESS                                                       |
| 84170409     | Application |               | 5/11/2015   |            | 14/709132          | US | STORING INDICATORS OF UNREFERENCED MEMORY ADDRESSES IN VOLATILE MEMORY         |
| 84172702     | Application |               | 3/31/2015   |            | 14/675556          | US | CLOUD MODELS                                                                   |
| 84172741     | Application |               | 4/6/2015    |            | 14/679757          | US | DETERMINING STRING SIMILARITY USING SYNTACTIC EDIT DISTANCE                    |
| 84173614     | Application |               | 5/27/2015   |            | 14/723102          | US | IDENTIFYING ALGORITHMICALLY GENERATED DOMAINS                                  |
| 84174522     | Application |               | 9/26/2012   |            | 14/425592          | US | MULTICAST MESSAGE UPDATE                                                       |
| 84178421     | Allowed     |               | 12/31/2012  |            | 13/731414          | US | SYSTEMS AND METHODS FOR PREDICTIVE POWER MANAGEMENT IN A COMPUTING CENTER      |
| 84178563     | Published   |               | 8/31/2012   |            | 14/424767          | US | SELECTING A RESOURCE TO BE USED IN A DATA BACKUP OR RESTORE OPERATION          |
| 84179374     | Published   |               | 10/31/2012  |            | 14/425247          | US | REPAIRING A MEMORY DEVICE                                                      |
| 84179380     | Published   |               | 9/28/2012   |            | 14/427866          | US | GENERATING A SHAPE GRAPH FOR A ROUTING TABLE                                   |

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| 84185041     | Application |               | 9/14/2012   |            | 14/428038          | US | DETERMINING A LOAD DISTRIBUTION FOR DATA UNITS                                                                                |
| 84186410     | Published   |               | 9/18/2012   |            | 14/426367          | US | PACKET INSPECTION DEVICE                                                                                                      |
| 84189979     | Application |               | 3/6/2015    |            | 14/640730          | US | Mining Questions Related To An Electronic Text Document                                                                       |
|              |             |               |             |            |                    |    | Computing Entities, Platforms And Methods Operable To Perform Operations Selectively Using Different Cryptographic Algorithms |
| 84191341     | Application |               | 5/13/2015   |            | 29/526789          | US | HANDLE                                                                                                                        |
| 84191568     | Application |               | 4/27/2015   |            | 29/525134          | US | ROUTER                                                                                                                        |
| 84191748     | Published   |               | 9/25/2012   |            | 14/430877          | US | NOTIFICATION OF ADDRESS RANGE INCLUDING NON-CORRECTABLE ERROR                                                                 |
| 84191765     | Application |               | 8/9/2013    |            | 14/432191          | US | QR CODE UTILIZATION IN SELF-REGISTRATION IN A NETWORK                                                                         |
|              |             |               |             |            |                    |    |                                                                                                                               |
| 84192661     | Application |               | 10/8/2012   |            | 14/434241          | US | ROBUST HARDWARE FAULT MANAGEMENT SYSTEM, METHOD AND FRAMEWORK FOR ENTERPRISE DEVICES                                          |
| 84193721     | Application |               | 1/14/2013   |            | 14/759713          | US | NONVOLATILE MEMORY ARRAY LOGIC                                                                                                |
| 84195029     | Application |               | 4/28/2015   |            | 14/698675          | US | STATUS UPDATE FOR A DEVICE IDENTIFIER IN A COMMUNICATION NETWORK                                                              |
| 84200925     | Application |               | 3/20/2015   |            | 62/136188          | US | STANDARDIZED CUSTOM SURVEYS                                                                                                   |
| 84202562     | Published   |               | 5/14/2015   |            | 14/711768          | US | MONITORING AND MITIGATING CLIENT-SIDE EXPLOITATION OF APPLICATION FLAWS                                                       |
| 84202579     | Application |               | 11/12/2012  |            | 14/441424          | US | ASSIMILATING BUSINESS RULES                                                                                                   |
| 84202591     | Application |               | 11/28/2012  |            | 14/646961          | US | REGULATING APPLICATION TASK DEVELOPMENT                                                                                       |
| 84202608     | Application |               | 11/30/2012  |            | 14/646812          | US | RUNNING AGENTS TO EXECUTE AUTOMATION TASKS IN CLOUD SYSTEMS                                                                   |
| 84208035     | Application |               | 9/27/2012   |            | 14/431694          | US | BALANCING A LOAD BETWEEN POWER SUPPLIES TO INCREASE EFFICIENCY                                                                |
| 84210884     | Application |               | 11/29/2012  |            | 14/435786          | US | FAULT TOLERANCE IN A MULTI-CORE CIRCUIT                                                                                       |
| 84214430     | Published   |               | 6/1/2015    |            | 14/726792          | US | Workload Management With Resource Transfer Sequence Planned As A Function Of Ranking Of Resource Allocations                  |
| 84215527     | Application |               | 3/28/2013   |            | 14/760401          | US | DATA FLUSH OF GROUP TABLE                                                                                                     |
| 84217942     | Application |               | 10/31/2012  |            | 14/437363          | US | EXECUTING A QUERY HAVING MULTIPLE SET OPERATORS                                                                               |
| 84217954     | Application |               | 11/6/2012   |            | 14/439206          | US | ENHANCED GRAPH TRAVERSAL                                                                                                      |
| 84217966     | Application |               | 11/14/2012  |            | 14/441943          | US | UPDATING STATISTICS IN DISTRIBUTED DATABASES                                                                                  |
| 84220837     | Application |               | 4/13/2015   |            | 14/684555          | US | Network Switching Device for Quantifying Available Service-level Capacity of a Network For Projected Network Traffic          |
| 84220851     | Published   |               | 4/24/2015   |            | 14/695789          | US | MALICIOUS CODE DETECTION                                                                                                      |
| 84220857     | Published   |               | 5/19/2015   |            | 14/716250          | US | Zone Group Reassignment Using Storage Device Signatures                                                                       |
| 84221543     | Allowed     |               | 5/18/2015   |            | 14/715249          | US | CONFIGURATION SPACE WITH PSEUDO DEVICE IDENTIFIER                                                                             |
| 84223080     | Application |               | 6/30/2015   |            | 14/755125          | US | MANAGEMENT OF CRYPTOGRAPHIC KEYS                                                                                              |

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| 84223664     | Application |               | 11/5/2012   |            | 14/437024          | US | Cellular Base Station                                                                                    |
| 84224835     | Application |               | 4/20/2015   |            | 14/690682          | US | Managing Data Paths Between Computer Applications And Data Storage Devices                               |
| 84224855     | Application |               | 3/29/2013   |            | 14/765107          | US | PERFORMANCE RULES AND STORAGE UNITS                                                                      |
| 84224866     | Published   |               | 4/16/2015   |            | 14/688878          | US | APPARATUS, AND ASSOCIATED METHOD, FOR GENERATING AN INFORMATION TECHNOLOGY INCIDENT REPORT               |
| 84230234     | Published   |               | 5/19/2015   |            | 14/716473          | US | STORING DATA IN PERSISTENT HYBRID MEMORY                                                                 |
| 84232801     | Application |               | 10/26/2012  |            | 14/438386          | US | Summarization of a Document                                                                              |
| 84237633     | Application |               | 11/28/2012  |            | 14/439518          | US | DETERMINING AT LEAST ONE COST FACTOR ASSOCIATED WITH USING THE CLOUD TO PROVIDE AN APPLICATION COMPONENT |
| 84237731     | Application |               | 4/29/2015   |            | 14/699244          | US | DISTRIBUTED NETWORK INSTRUMENTATION SYSTEM                                                               |
| 84237785     | Application |               | 10/31/2012  |            | 14/439763          | US | Patient oriented hospital care approach and system                                                       |
| 84237920     | Published   |               | 10/31/2012  |            | 14/439887          | US | GENERATING AN OUTPUT BASED ON COLLECTING INFORMATION RELATING TO A CASE                                  |
| 84247408     | Application |               | 11/30/2012  |            | 14/648290          | US | MEMORY CONTROLLERS TO FORM SYMBOLS BASED ON BURSTS                                                       |
| 84249418     | Application |               | 1/30/2013   |            | 14/763532          | US | CONTROLLING ERROR PROPAGATION DUE TO FAULT IN COMPUTING NODE OF A DISTRIBUTED COMPUTING SYSTEM           |
| 84252613     | Application |               | 12/3/2012   |            | 14/646121          | US | ASYNCHRONOUS FRAMEWORK FOR MANAGEMENT OF IAAS                                                            |
| 84252632     | Application |               | 12/3/2012   |            | 14/646847          | US | CLOUD OBJECT                                                                                             |
| 84252644     | Application |               | 12/3/2012   |            | 14/646857          | US | CLOUD SERVICE MANAGEMENT SYSTEM                                                                          |
| 84252656     | Application |               | 12/19/2012  |            | 14/653213          | US | MULTI-CHANNEL CONVERSATION                                                                               |
| 84260161     | To Be Filed |               | 10/9/2013   |            |                    | US | INFORMATION TECHNOLOGY RESOURCE PLANNING                                                                 |
| 84262826     | Application |               | 7/28/2015   |            | 14/811673          | US | Shared Symmetric Key Encryption                                                                          |
| 84264652     | Application |               | 8/6/2015    |            | 14/819963          | US | IDENTIFICATION OF AN APPLICATION BASED ON PACKET SIZE                                                    |
| 84264755     | Application |               | 7/31/2015   |            | 14/815452          | US | REMEDIATING RANSOMWARE                                                                                   |
| 84265110     | Application |               | 8/7/2015    |            | 14/821127          | US | CLOUD MODELS BASED ON LOGICAL NETWORK INTERFACE DATA                                                     |
| 84265585     | Application |               | 11/30/2012  |            | 14/648416          | US | PATH TO HOST IN RESPONSE TO MESSAGE                                                                      |
| 84265743     | Application |               | 11/30/2012  |            | 14/647833          | US | Distributed Pattern Discovery                                                                            |
| 8426647      | Application |               | 7/9/2015    |            | 14/795684          | US | REUSABLE SEMICONDUCTOR SUBSTRATES                                                                        |
| 84269653     | Application |               | 7/31/2015   |            | 14/815,179         | US | UPDATING SERVICE LEVEL TARGETS                                                                           |
| 84269661     | Application |               | 7/21/2015   |            | 14/804654          | US | ASSOCIATING ERROR EVENTS WITH INPUTS TO APPLICATIONS                                                     |

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| 84269704     | Application |               | 1/31/2013   |            | 14/764922          | US | Mapping Mechanism for Large Shared Address Spaces                                                 |
| 84273537     | Application |               | 12/11/2013  |            | 14/648982          | US | RESULT AGGREGATION                                                                                |
| 84274043     | Application |               | 12/4/2012   |            | 14/649191          | US | Displaying Information Technology Conditions with Heat Maps                                       |
| 84275149     | Application |               | 12/19/2012  |            | 14/650571          | US | HEAT REMOVAL ASSEMBLY                                                                             |
| 84279580     | Application |               | 12/11/2012  |            | 14/651185          | US | Provisioning Tools for Application Development                                                    |
| 84279717     | Application |               | 6/8/2015    |            | 62/172598          | US | DevOps and Test Recommendations with User Coverage Attribution Usage                              |
| 84283824     | Application |               | 1/30/2013   |            | 14/763996          | US | NON-VOLATILE MEMORY WRITE MECHANISM                                                               |
| 84288007     | To Be Filed |               |             |            | US                 |    | Managing Host Logins To Storage Systems                                                           |
| 84289254     | Application |               | 7/29/2015   |            | 14/813068          | US | STORAGE ENCLOSURE BRIDGE DETECTION                                                                |
| 84289444     | Application |               | 2/1/2013    |            | 14/764991          | US | STORING BACKUP DATA SEPARATE FROM CATALOG DATA                                                    |
| 84290723     | Application |               | 7/2/2015    |            | 14/790881          | US | PROCESSOR TOPOLOGY SWITCHES                                                                       |
| 84291313     | Application |               | 1/15/2013   |            | 14/759651          | US | Server-Platform Simulation Service                                                                |
| 84291356     | Application |               | 1/30/2013   |            | 14/763582          | US | Power Sequencing by Slave Power Sequencers Sharing a Command Bus                                  |
| 84291398     | Application |               | 8/4/2015    |            | 14/818,054         | US | Query Plan Analysis Of Alternative Plans Using Robustness Mapping                                 |
| 84292970     | Application |               | 1/31/2013   |            | 14/764144          | US | UPDATING A COMMIT LIST TO INDICATE DATA TO BE WRITTEN TO A FIRMWARE INTERFACE VARIABLE REPOSITORY |
|              |             |               |             |            |                    |    |                                                                                                   |
| 84296125     | Application |               | 7/1/2015    |            | 14/789437          | US | MAXIMIZING SERVER UTILIZATION WITHIN A DATACENTER                                                 |
| 84296214     | Application |               | 6/29/2015   |            | 14/753210          | US | Network Zone Identification In A Network Security System                                          |
| 84297184     | Application |               | 7/27/2015   |            | 14/810389          | US | ELEPHANT FLOW DETECTION IN A COMPUTING DEVICE                                                     |
| 84301105     | Application |               | 7/2/2015    |            | 62/188455          | US | AUTO-RESOLUTION OF RULES TO RESOURCE TYPES                                                        |
| 84301111     | Application |               | 7/2/2015    |            | 62/188461          | US | Intelligent Scheduler for Resource Policy Implementation                                          |
| 84301904     | Application |               | 3/28/2013   |            | 14/763943          | US | Implementing Coherency with Reflective Memory                                                     |
| 84301961     | Application |               | 3/28/2013   |            | 14/760191          | US | APPARATUS AND METHOD FOR STORAGE DEVICE READING                                                   |
| 84301995     | Application |               | 3/14/2013   |            | 14/762715          | US | RADIO FREQUENCY DATA COLLECTION                                                                   |
| 84302007     | Application |               | 3/31/2013   |            | 14/760189          | US | SCHEDULE FOR ACCESS TO SHARED WIRELESS MEDIUM BASED ON PROFILE DATA                               |
| 84304246     | Application |               | 2/26/2013   |            | 14/759959          | US | FEDERATED SOCIAL MEDIA ANALYSIS SYSTEM AND METHOD THEREOF                                         |
| 84304282     | Application |               | 7/9/2015    |            | 29/532,728         | US | MICROSERVER                                                                                       |
| 84304286     | Application |               | 7/9/2015    |            | 29/532733          | US | MICROSERVER                                                                                       |
| 84304337     | Application |               | 3/15/2013   |            | 14/759977          | US | MAP MATCHING                                                                                      |
| 84304414     | Application |               | 1/23/2013   |            | 14/759659          | US | SHARED RESOURCE CONTENTION                                                                        |
| 84304428     | Application |               | 1/25/2013   |            | 14/759682          | US | Detecting Fraud in Resource Distribution Systems                                                  |
| 84304443     | Application |               | 1/30/2013   |            | 14/763591          | US | RECOVERING PAGES OF A DATABASE                                                                    |

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| 84304483     | Application |               | 1/31/2013   |            | 14/764234          | US | AREA OCCUPANCY INFORMATION EXTRACTION                                                             |
| 84304495     | Application |               | 3/15/2013   |            | 14/764609          | US | MEMORY MODULE CONTROLLER SUPPORTING EXTENDED WRITES                                               |
| 84306281     | Application |               | 1/29/2013   |            | 14/761342          | US | GENERATING TEST CODE TO TEST EXECUTABLE CODE                                                      |
| 84306295     | Application |               | 1/22/2013   |            | 14/759837          | US | DETERMINING A REMEDIAL ACTION FOR A MOTORIZED VEHICLE BASED ON SENSED VIBRATION                   |
| 84306312     | Application |               | 1/31/2013   |            | 14/761534          | US | GENERATING SOFTWARE TEST SCRIPT FROM VIDEO                                                        |
| 84306381     | Application |               | 1/30/2013   |            | 14/759894          | US | SYSTEMS AND METHODS FOR DETERMINING COMPATIBILITY BETWEEN SOFTWARE LICENSES                       |
| 84306472     | Application |               | 3/15/2013   |            | 14/764563          | US | ENERGY BASED NETWORK RESTRUCTURING                                                                |
| 84306944     | Application |               | 7/23/2015   |            | 14/806653          | US | Segmenting Bus Topology                                                                           |
| 84311788     | Application |               | 1/31/2013   |            | 14/765321          | US | METHODS AND APPARATUS FOR DEBUGGING OF REMOTE SYSTEMS                                             |
| 84311845     | Application |               | 1/31/2013   |            | 14/761359          | US | ERROR DEVELOPER ASSOCIATION                                                                       |
| 84311922     | Application |               | 4/30/2013   |            | 14/761370          | US | DEPENDENCY MONITORING                                                                             |
| 84312504     | Application |               | 2/27/2013   |            | 14/764988          | US | Sending a Request to a Management Service                                                         |
| 84312544     | Application |               | 2/27/2013   |            | 14/764746          | US | SELECTING A BACKUP TYPE BASED ON CHANGED DATA                                                     |
| 84312569     | Application |               | 2/28/2013   |            | 14/764717          | US | REDUCING POWER FOR STORAGE DEVICES                                                                |
| 84312589     | Application |               | 2/25/2013   |            | 14/763172          | US | PRESENTATION OF USER INTERFACE ELEMENTS BASED ON RULES                                            |
| 84312647     | Application |               | 1/18/2013   |            | 14/762181          | US | PREVENTING A MEMORY ATTACK TO A WIRELESS ACCESS POINT                                             |
| 84312707     | Application |               | 2/28/2013   |            | 14/764280          | US | DETERMINING COVERAGE OF DYNAMIC SECURITY SCANS USING RUNTIME AND STATIC CODE ANALYSES             |
| 84312815     | Application |               | 1/31/2013   |            | 14/764596          | US | SHARING INFORMATION                                                                               |
| 84312830     | Application |               | 1/31/2013   |            | 14/764670          | US | TARGETED SECURITY ALERTS                                                                          |
| 84312856     | Application |               | 1/31/2013   |            | 14/761567          | US | PHYSICAL RESOURCE ALLOCATION                                                                      |
| 84312899     | Application |               | 2/1/2013    |            | 14/761574          | US | TEST SCRIPT CREATION BASED ON ABSTRACT TEST USER CONTROLS                                         |
| 84312965     | Application |               | 1/18/2013   |            | 14/761368          | US | TASK ASSIGNMENT IN CROWDSOURCING                                                                  |
| 90001553     | Application |               | 7/23/2015   |            | 29/533984          | US | Multi-Sectional Door for a Flexrack                                                               |
| 90015805     | Application |               | 7/28/2015   |            | 14/810992          | US | DYNAMIC PROVISIONING OF VIRTUAL SYSTEMS                                                           |
| 90016086     | Application |               | 1/30/2013   |            | 14/763504          | US | UNIFIED CONTROL OF AN ELECTRONIC CONTROL SYSTEM AND A FACILITY CONTROL SYSTEM                     |
| 90016435     | Application |               | 1/23/2013   |            | 14/762759          | US | Balancing Access Point Workloads                                                                  |
| 90016449     | Application |               | 8/11/2015   |            | 14/823591          | US | System And Method For Dynamically Allocating Resources                                            |
| 90016463     | Application |               | 1/24/2013   |            | 14/762941          | US | LIMITING ACCESS TO SERVICE PROVIDERS BASED ON THE NETWORK TRAFFIC LOAD OF A WIRELESS ACCESS POINT |
| 90016523     | Application |               | 3/21/2013   |            | 14/778405          | US | USING A NETWORK SWITCH TO CONTROL A VIRTUAL LOCAL NETWORK IDENTITY ASSOCIATION                    |

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| 90016538     | Application  |               | 7/22/2015   |            | 14/805505          | US | METHOD OF PURCHASING INSURANCE OR VALIDATING ANONYMOUS TRANSACTION                                                  |
| 90016564     | Application  |               | 1/29/2013   |            | 14/764229          | US | METHODS AND SYSTEMS FOR SHARED FILE STORAGE                                                                         |
| 90016641     | Application  |               | 1/31/2013   |            | 14/762590          | US | SYNTHETIC HEALTHCARE DATA GENERATION                                                                                |
| 90016689     | Application  |               | 1/31/2013   |            | 14/763218          | US | Linking Media Access Between Devices                                                                                |
| 90017096     | Application  |               | 1/30/2013   |            | 14/764093          | US | CONTROLLING A TOPOLOGY OF A NETWORK                                                                                 |
| 90017116     | Application  |               | 1/31/2013   |            | 14/763496          | US | NETWORK SWITCH STIMULATION                                                                                          |
| 90017145     | Application  |               | 1/31/2013   |            | 14/763793          | US | Approximate Query Processing                                                                                        |
| 90017154     | Application  |               | 1/31/2013   |            | 14/763488          | US | Event Log System                                                                                                    |
| 90022223     | Application  |               | 11/12/2013  |            | 14/764084          | US | NETWORK MANAGEMENT ACCESS BASED PREVIOUS REGISTRATION OF USER DEVICE                                                |
| 90022663     | Application  |               | 7/29/2015   |            | 14/812750          | US | MANAGING MAC MOVES WITH SECURE PORT GROUPS                                                                          |
| 90022729     | Application  |               | 3/27/2013   |            | 14/780381          | US | Non-Volatile Memory Based Synchronous Logic                                                                         |
| 90022769     | Application  |               | 1/31/2013   |            | 14/764960          | US | RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH                                                                        |
| 90022827     | Application  |               | 1/31/2013   |            | 14/764973          | US | DETERMINING TRANSFERABILITY OF A COMPUTING RESOURCE TO A CLOUD COMPUTING ENVIRONMENT                                |
| 90022856     | Application  |               | 2/7/2013    |            | 14/765011          | US | Formatting Semi-Structured Data in a Database                                                                       |
| 90024189     | Application  |               | 2/28/2013   |            | 14/764937          | US | RECOVERY PROGRAM USING DIAGNOSTIC RESULTS                                                                           |
| 90024630     | Application  |               | 3/28/2013   |            | 14/778341          | US | REGULATING MEMORY ACTIVATION RATES                                                                                  |
| 90024639     | Application  |               | 3/28/2013   |            | 14/780392          | US | Split Mode Addressing of Persistent Memory                                                                          |
| 90025981     | Application  |               | 3/28/2013   |            | 14/777132          | US | Shared Memory System                                                                                                |
| 90028910     | Application  |               | 4/1/2013    |            | 14/780389          | US | External Memory Controller                                                                                          |
| 90028926     | Acknowledged |               | 4/2/2013    |            |                    | US | STATE-RETAINING LOGIC CELL                                                                                          |
| 90030653     | Application  |               | 9/2/2015    |            | 14/843824          | US | PERSISTENT CHECKSUM DATA VALIDATION                                                                                 |
| 90031016     | Application  |               | 8/18/2015   |            | 14/829076          | US | INVERSION OF CONTROL FOR EXECUTABLE EXTENSIONS IN A RUN-TIME ENVIRONMENT                                            |
| 90031025     | Application  |               | 3/12/2013   |            | 14/773943          | US | IDENTIFYING TRANSPORT-LEVEL ENCODED PAYLOADS                                                                        |
| 90031133     | To Be Filed  |               | 4/30/2013   |            |                    | US | DEPENDENCIES BETWEEN FEATURE FLAGS                                                                                  |
| 90031145     | To Be Filed  |               | 4/30/2013   |            |                    | US | Coordinating Application Deployment with a Platform Tier                                                            |
| 90032823     | Application  |               | 8/13/2015   |            | 14/825987          | US | OPTIMIZING EXECUTION AND RESOURCE USAGE IN LARGE SCALE COMPUTING                                                    |
| 90035359     | Acknowledged |               |             |            |                    | US | Dial like interaction gesture for triggering navigation.                                                            |
| 90037373     | Application  |               | 3/12/2013   |            | 14/773549          | US | PROGRAMMABLE ADDRESS MAPPING AND MEMORY ACCESS OPERATIONS                                                           |
| 90037735     | Acknowledged |               |             |            |                    | US | Micro-services as SOA services with management and API that support logic or data source decoupling from API and UI |
| 90037831     | To Be Filed  |               |             |            |                    | US | Suggest relevant code using user story description                                                                  |
| 90037980     | To Be Filed  |               |             |            |                    | US | Improved Memory Resiliency Method                                                                                   |

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|--------------|--------------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------|
| 90039626     | Application  |               | 8/27/2015   |            | 14/837472          | US | DATA PACKET FLOW RULE FIELD RANGE OF AN APPLICATION                      |
| 90039666     | Application  |               | 9/25/2015   |            | 14/865505          | US | SPECIFIC INTEGRATED CIRCUIT                                              |
| 90039721     | To Be Filed  |               |             |            |                    | US | WIDGETS IN DIGITAL DASHBOARDS                                            |
| 90041049     | Application  |               | 8/31/2015   |            | 14/841088          | US | Connecting data sources to dashboard widget using virtual data channels. |
|              |              |               |             |            |                    |    | SERIAL CONNECTION EXTERNAL INTERFACE RISER CARDS                         |
|              |              |               |             |            |                    |    | AVOIDANCE OF ABUTMENT OF PARALLEL CONNECTION                             |
|              |              |               |             |            |                    |    | EXTERNAL INTERFACE MEMORY MODULES                                        |
| 90041289     | Application  |               | 3/13/2013   |            | 14/772352          | US | COUPLED RING RESONATOR SYSTEM                                            |
| 90041312     | Application  |               | 3/13/2013   |            | 14/772358          | US | BACKLIGHT HAVING COLLIMATING REFLECTOR                                   |
| 90041332     | Application  |               | 4/11/2013   |            | 14/773179          | US | MODE CONVERSION FOR OPTICAL ISOLATION                                    |
| 90045017     | Application  |               | 3/25/2013   |            | 14/779969          | US | Extensible Firmware Abstraction                                          |
| 90046368     | Application  |               | 3/14/2013   |            | 14/771800          | US | SUPPORT MEMBER                                                           |
| 90046408     | Application  |               | 9/11/2015   |            | 14/852052          | US | Distributed Network Connection Policy Management                         |
| 90047310     | Application  |               | 9/18/2015   |            | 14/858,958         | US | Cooling Apparatus                                                        |
| 90048531     | Acknowledged |               | 4/30/2013   |            |                    | US | Memory Access Rate                                                       |
| 90048549     | Acknowledged |               | 4/30/2013   |            |                    | US | Coalescing Memory Access Requests                                        |
| 90048706     | Application  |               | 9/14/2015   |            | 14/853415          | US | Data Processing System And Method                                        |
| 90049373     | Application  |               | 3/26/2013   |            | 14/780523          | US | TOP LOADING CARTRIDGE                                                    |
| 90049391     | Application  |               | 3/28/2013   |            | 14/781014          | US | MAKING MEMORY OF COMPUTE AND EXPANSION BLADE                             |
|              |              |               |             |            |                    |    | DEVICES AVAILABLE FOR USE BY AN OPERATING SYSTEM                         |
| 90050868     | Application  |               | 9/4/2015    |            | 14/846502          | US | NETWORK ASSET INFORMATION MANAGEMENT                                     |
| 90050928     | Application  |               | 9/4/2015    |            | 14/845670          | US | NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                  |
| 90051534     | Application  |               | 3/28/2013   |            | 14/781022          | US | IDENTIFYING MEMORY OF A BLADE DEVICE FOR USE BY AN                       |
|              |              |               |             |            |                    |    | OPERATING SYSTEM OF A PARTITION INCLUDING THE BLADE                      |
|              |              |               |             |            |                    |    | DEVICE                                                                   |
| 90051568     | Application  |               | 3/29/2013   |            | 14/781299          | US | SHARING FIRMWARE AMONG AGENTS IN A COMPUTING                             |
|              |              |               |             |            |                    |    | NODE                                                                     |
| 90051575     | Application  |               | 3/7/2013    |            | 14/773084          | US | SYNCHRONIZING SIGNAL TRANSMISSIONS BY ANTENNA                            |
|              |              |               |             |            |                    |    | APPARATUS                                                                |
| 90052828     | Application  |               | 3/15/2013   |            | 14/775329          | US | CO-PROCESSOR-BASED ARRAY-ORIENTED                                        |
|              |              |               |             |            |                    |    | DATABASE PROCESSING                                                      |
| 90053561     | Application  |               | 3/28/2013   |            | 14/780544          | US | STORING DATA FROM CACHE LINES TO MAIN MEMORY                             |
|              |              |               |             |            |                    |    | BASED ON MEMORY ADDRESSES                                                |
| 90053570     | Application  |               | 3/29/2013   |            | 14/780482          | US | ELECTRONIC APPARATUS HAVING A COOLING APPARATUS                          |
| 90055201     | Application  |               | 3/13/2013   |            | 14/775811          | US | MEMRISTORS WITH DOPANT-COMPENSATED SWITCHING                             |
| 90056294     | Application  |               | 3/15/2013   |            | 14/777501          | US | MAINTENANCE OF DATA FORWARDER CONNECTION STATE                           |
|              |              |               |             |            |                    |    | INFORMATION                                                              |
| 90056309     | Application  |               | 3/15/2013   |            | 14/777497          | US | NETWORK DEVICE ARCHITECTURE ADJUSTMENTS                                  |

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| 90056389     | To Be Filed  |               | 4/3/2013    |            |                    | US | MICROCONTROLLER AT A CARTRIDGE OF A CHASSIS                                                                |
| 90056463     | To Be Filed  |               |             |            |                    | US | MANAGING TARGET COMPUTER USING ENCAPSULATED-FILE                                                           |
| 90056870     | Application  |               | 3/15/2013   |            | 14/777475          | US | MULTIBAND OPERATION OF A SINGLE WI-FI RADIO                                                                |
| 90056890     | To Be Filed  |               | 4/3/2013    |            |                    | US | Disabling Counterfeit Cartridges                                                                           |
| 90065904     | Application  |               | 3/28/2013   |            | 14/780686          | US | SHIELD FOR AN ELECTRONIC DEVICE                                                                            |
| 90065952     | Application  |               | 3/29/2013   |            | 14/780352          | US | INTERACTIVE SLIDE DECK                                                                                     |
| 90068030     | Acknowledged |               |             |            |                    | US | Variable chunking for large file download                                                                  |
| 90068045     | Application  |               | 3/28/2013   |            | 14/780707          | US | GENERATING A FEATURE SET                                                                                   |
| 90068053     | Acknowledged |               |             |            |                    | US | Storage Techniques to Support Cloud Computing                                                              |
| 90068073     | Application  |               | 3/29/2013   |            | 14/780734          | US | QUERY FEATURES AND QUESTIONS                                                                               |
| 90068236     | To Be Filed  |               | 4/3/2013    |            |                    | US | DEVICE PAIRING FOR CONTENT SHARING                                                                         |
| 90068334     | To Be Filed  |               | 4/2/2013    |            |                    | US | SHARING A WEB BROWSER SESSION BETWEEN DEVICES IN A SOCIAL GROUP                                            |
| 90068528     | Application  |               | 3/28/2013   |            | 14/780976          | US | ERROR COORDINATION MESSAGE FOR A BLADE DEVICE HAVING A LOGICAL PROCESSOR IN ANOTHER SYSTEM FIRMWARE DOMAIN |
| 90068549     | To Be Filed  |               |             |            |                    | US | Service Chaining                                                                                           |
| 82274969     | Granted      | 8626822       | 8/28/2008   | 41646      | 12/199929          | US | Method For Implementing Network Resource Access Functions Into Software Applications                       |
| 84076359     | Published    |               | 6/25/2012   |            | 14/391222          | US | TRANSLATED SESSION INFORMATION TO PROVISION A NETWORK PATH                                                 |
| 84140014     | Published    |               | 9/11/2012   |            | 14/414468          | US | Discovering IP Multicast Group Memberships In Software Defined Networks                                    |
| 84149048     | Application  |               | 7/31/2012   |            | 14/417059          | US | POWER EFFICIENT NETWORK WITH NETWORK CONTROLLER                                                            |
| 90037098     | Application  |               | 8/27/2015   |            | 14/837533          | US | APPLICATION-SPECIFIC INTEGRATED CIRCUIT DATA FLOW ENTITY COUNTING                                          |
| 81966932     | Granted      | 6818835       | 4/22/2003   | 38307      | 10/420572          | US | Processor And Power Supply Circuit                                                                         |
| 82088669     | Granted      | 7185214       | 8/12/2002   | 39140      | 10/216234          | US | System And Method For Load Dependent Frequency And Performance Modulation In Bladed Systems                |
| 82098413     | Granted      | 7474229       | 9/13/2006   | 39819      | 11/531433          | US | Computer System Indicator Panel With Exposed Indicator Edge                                                |
| 82120574     | Granted      | 7093146       | 7/31/2002   | 38944      | 10/210424          | US | POWER MANAGEMENT STATE DISTRIBUTION USING AN INTERCONNECT                                                  |
| 82128695     | Granted      | 5694302       | 8/20/1996   | 35766      | 08/699990          | US | PASSIVE CLAMP AND RIPPLE CONTROL FOR BUCK BOOST CONVERTER                                                  |
| 82129190     | Granted      | 5821641       | 7/30/1996   | 36081      | 08/690640          | US | SECONDARY SUPPLY POWER REFERENCED INTERLOCK CIRCUIT                                                        |

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| 82129505     | Granted     | 5821636       | 8/8/1997    | 36081      | 08/907518          | US | LOW PROFILE, REDUNDANT SOURCE POWER DISTRIBUTION UNIT                                                                |
| 82133183     | Granted     | 7138733       | 12/13/2001  | 39042      | 10/017785          | US | REDUNDANT DATA AND POWER INFRASTRUCTURE FOR MODULAR SERVER COMPONENTS IN A RACK                                      |
| 82178384     | Granted     | 7496740       | 7/26/2004   | 39868      | 10/899394          | US | Accessing Information Associated With An Advanced Configuration And Power Interface Environment                      |
| 82179008     | Granted     | 7627774       | 2/25/2005   | 40148      | 11/066024          | US | REDUNDANT MANAGER MODULES TO PERFORM MANAGEMENT TASKS WITH RESPECT TO AN INTERCONNECTED STRUCTURE AND POWER SUPPLIES |
| 82179389     | Granted     | 7646183       | 5/31/2005   | 40190      | 11/141341          | US | Adjusting An Output Voltage Of A Converter Based On Current Consumption                                              |
| 82206977     | Granted     | 8423832       | 11/7/2006   | 41380      | 11/593841          | US | System And Method For Preventing Processor Errors                                                                    |
| 82214102     | Granted     | 8327168       | 11/19/2008  | 41247      | 12/274225          | US | System And Method For Throttling Memory Power Consumption                                                            |
| 82248563     | Published   |               | 4/30/2009   |            | 12/433421          | US | Power Supply System Having A Redundant Supply That Remains Online While Sourcing No Current (As Amended)             |
| 82250747     | Granted     | 8067857       | 40023       | 40876      | 12/512017          | US | REDUNDANT POWER SUPPLY SYSTEMS AND METHODS                                                                           |
| 82675549     | Granted     | 8564269       | 12/13/2008  | 41569      | 13/133364          | US | Systems And Methods For Scaling A Signal In A Power Factor Correction Circuit                                        |
| 82817501     | Granted     | 8868900       | 39868       | 41933      | 13/148012          | US | Method And System To Lower Power Consumption                                                                         |
| 90001180     | Application |               | 42209       |            | 14/808,641         | US | POWER CONVERTER DEPENDENT ON A VOLTAGE RANGE THE INPUT VOLTAGE RESIDES IN                                            |
| 81998273     | Granted     | 6704200       | 37299       | 38055      | 10/074885          | US | Loop Thermosyphon Using Microchannel Etched Semiconductor Die As Evaporator                                          |
| 82096475     | Granted     | 6961242       | 7/31/2003   | 38657      | 10/631696          | US | SYSTEM FAN MANAGEMENT BASED ON SYSTEM LOADING OPTIONS FOR A SYSTEM HAVING REPLACEABLE ELECTRONICS MODULES            |
| 82099409     | Granted     | 6807057       | 1/22/2003   | 38279      | 10/348875          | US | Apparatus And Method For Cooling An Electronic Device                                                                |
| 82101968     | Granted     | 6819562       | 37652       | 38307      | 10/355424          | US | Cooling Apparatus For Stacked Components                                                                             |
| 82103654     | Granted     | 7079390       | 6/5/2003    | 38916      | 10/456671          | US | System And Method For Heat Dissipation And Air Flow Redirection In A Chassis                                         |
| 82103660     | Granted     | 6913069       | 8/14/2003   | 38538      | 10/641502          | US | Cooling Device Having Fins Arranged To Funnel Air                                                                    |
| 82106900     | Granted     | 6987370       | 6/23/2003   | 38734      | 10/602972          | US | Method And System For Cooling Electronic Components                                                                  |
| 82132814     | Granted     | 6086476       | 7/31/1998   | 36718      | 09/127565          | US | METHOD AND APPARATUS FOR COOLING AND ACOUSTIC NOISE REDUCTION IN A COMPUTER                                          |
| 82174640     | Granted     | 6927976       | 1/15/2004   | 38573      | 10/759846          | US | Air Baffle For Managing Cooling Air Re-Circulation In An Electronic System                                           |
| 82174769     | Granted     | 8430156       | 4/29/2004   | 41394      | 10/835956          | US | Liquid Loop With Multiple Pump Assembly                                                                              |
| 82174955     | Granted     | 7142424       | 4/29/2004   | 39049      | 10/835852          | US | Heat Exchanger Including Flow Straightening Fins                                                                     |

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| 82175138     | Granted   | 7325588       | 4/29/2004   | 39483      | 10/837459          | US | HIGH SERVICEABILITY LIQUID COOLING LOOP USING FLEXIBLE BELLOWS                                                                    |
| 82177451     | Granted   | 6997247       | 4/29/2004   | 38762      | 10/835955          | US | MULTIPLE-PASS HEAT EXCHANGER WITH GAPS BETWEEN FINS OF ADJACENT TUBE SEGMENTS                                                     |
| 82183007     | Granted   | 7322799       | 10/31/2003  | 39476      | 10/699430          | US | Scalable, Modular, High Availability Fan System                                                                                   |
| 82185254     | Granted   | 7354246       | 10/26/2005  | 39546      | 11/260095          | US | Electronics Cooling Fan With Collapsible Fan Blade                                                                                |
| 82188005     | Granted   | 6948555       | 6/22/2004   | 38622      | 10/874408          | US | HEAT DISSIPATING SYSTEM AND METHOD                                                                                                |
| 82202297     | Granted   | 7443671       | 10/31/2005  | 39749      | 11/263662          | US | Axial Duct Cooling Fan                                                                                                            |
| 82208726     | Granted   | 7450380       | 10/25/2006  | 39763      | 11/552707          | US | Computer System Having Multi-direction Blower                                                                                     |
| 82224149     | Granted   | 7551440       | 1/24/2007   | 39987      | 11/657145          | US | SYSTEM AND METHOD FOR COOLING AN ELECTRONIC COMPONENT                                                                             |
| 82240379     | Granted   | 8559177       | 4/14/2008   | 41562      | 12/937333          | US | Fan For Computer Element In The Service Position                                                                                  |
| 82260425     | Granted   | 8300404       | 4/15/2010   | 41212      | 12/760825          | US | FAN HOLDER INCLUDING CABLE CHANNELS                                                                                               |
| 82938245     | Granted   | 9055698       | 2/26/2010   | 42164      | 13/387068          | US | Fluid Flow Control for Computing Device                                                                                           |
| 83218691     | Published |               | 10/12/2010  |            | 13/876399          | US | RESOURCE MANAGEMENT FOR DATA CENTERS                                                                                              |
| 83854699     | Published |               | 10/26/2011  |            | 14/350066          | US | Device for Cooling an Electronic Component in a Data Center                                                                       |
| 82092545     | Granted   | 7136804       | 10/30/2002  | 39035      | 10/283770          | US | Systems And Methods For Providing Users With Information In Audible Form                                                          |
| 84072924     | Published |               | 7/24/2012   |            | 14/394923          | US | INITIATING A HELP FEATURE                                                                                                         |
| 84156874     | Published |               | 9/25/2012   |            | 14/421115          | US | DISPLAYING INBOX ENTITIES AS A GRID OF FACETED TILES                                                                              |
| 82025804     | Granted   | 6172837       | 3/23/1998   | 36900      | 09/046809          | US | Postponable Servo Code Selection                                                                                                  |
| 82068629     | Granted   | 6701450       | 8/6/1999    | 38048      | 09/529113          | US | SYSTEM BACKUP AND RECOVERY                                                                                                        |
| 81978479     | Granted   | 6883071       | 38117       | 38461      | 10/841555          | US | Method For Evaluation Of Scalable Symmetric Multiple Processor Cache Coherency Protocols And Algorithms                           |
| 82000709     | Granted   | 6834327       | 2/8/2002    | 38342      | 10/071069          | US | Multilevel Cache System Having Unified Cache Tag Memory                                                                           |
| 82030859     | Granted   | 6493812       | 12/17/1999  | 37600      | 09/465722          | US | Apparatus And Method For Virtual Address Aliasing And Multiple Page Size Support In A Computer System Having A Prevalidated Cache |
| 82031483     | Granted   | 6427189       | 2/21/2000   | 37467      | 09/510973          | US | Multiple Issue Algorithm With Oversubscription Avoidance Features To Get High Bandwidth Through Cache Pipeline                    |
| 82046720     | Granted   | 6233669       | 10/30/1998  | 37026      | 09/183172          | US | MEMORY ADDRESS GENERATOR CAPABLE OF ROW-MAJOR AND COLUMN-MAJOR SWEEPS                                                             |
| 82106402     | Granted   | 7607038       | 38765       | 40106      | 11/357384          | US | Systems And Methods For CPU Repair                                                                                                |
| 82117514     | Granted   | 6832340       | 1/25/2001   | 38335      | 09/769959          | US | REAL-TIME HARDWARE MEMORY SCRUBBING                                                                                               |
| 82117640     | Granted   | 6738836       | 36769       | 38125      | 09/652391          | US | SCALABLE EFFICIENT I/O PORT PROTOCOL                                                                                              |
| 82117643     | Granted   | 8364851       | 10/2/2003   | 41303      | 10/677583          | US | Scalable Efficient I/O Port Protocol                                                                                              |
| 82117826     | Granted   | 6567900       | 8/31/2000   | 37761      | 09/652452          | US | EFFICIENT ADDRESS INTERLEAVING WITH SIMULTANEOUS MULTIPLE LOCALITY OPTIONS                                                        |
| 82120385     | Granted   | 6892271       | 10/21/2003  | 5/10/2005  | 10/690139          | US | MEMORY MODULE RESYNC                                                                                                              |

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| 82127696     | Granted     | 5987539       | 6/5/1996    | 36480      | 08/658704          | US | METHOD AND APPARATUS FOR FLUSHING A BRIDGE DEVICE READ BUFFER                                                                                       |
| 82127945     | Granted     | 5740188       | 5/29/1996   | 35899      | 08/654853          | US | ERROR CHECKING AND CORRECTING FOR BURST DRAM DEVICES                                                                                                |
| 82129256     | Granted     | 5978953       | 12/19/1996  | 36466      | 08/769655          | US | ERROR DETECTION AND CORRECTION                                                                                                                      |
| 82130693     | Granted     | 6052134       | 12/22/1997  | 36634      | 08/995705          | US | MEMORY CONTROLLER AND METHOD FOR DYNAMIC PAGE MANAGEMENT                                                                                            |
| 82133246     | Granted     | 6304945       | 5/13/1999   | 10/16/2001 | 09/311082          | US | METHOD AND APPARATUS FOR MAINTAINING CACHE COHERENCY IN A COMPUTER SYSTEM HAVING MULTIPLE PROCESSOR BUSES                                           |
| 82136684     | Granted     | 6163821       | 12/18/1998  | 12/19/2000 | 09/215354          | US | METHOD AND APPARATUS FOR BALANCING LOAD VS. STORE ACCESS TO A PRIMARY DATA CACHE                                                                    |
| 82136744     | Granted     | 6651144       | 6/18/1998   | 11/18/2003 | 09/099384          | US | METHOD AND APPARATUS FOR DEVELOPING MULTIPROCESSOR CACHE CONTROL PROTOCOLS USING AN EXTERNAL ACKNOWLEDGEMENT SIGNAL TO SET A CACHE TO A DIRTY STATE |
| 82165715     | Granted     | 6108752       | 10/24/1997  | 8/22/2000  | 08/957566          | US | METHOD AND APPARATUS FOR DELAYING VICTIM WRITES IN A SWITCH-BASED MULTI-PROCESSOR SYSTEM TO MAINTAIN DATA COHERENCY                                 |
| 82171205     | Granted     | 7103744       | 3/27/2003   | 9/5/2006   | 10/401235          | US | Binding A Memory Window To A Queue Pair                                                                                                             |
| 82181882     | Granted     | 7373467       | 1/10/2005   | 5/13/2008  | 11/032753          | US | Storage Device Flow Control                                                                                                                         |
| 82182821     | Granted     | 7340561       | 1/8/2004    | 3/4/2008   | 10/753276          | US | Computer Memory Initialization                                                                                                                      |
| 82201049     | Granted     | 7496823       | 3/16/2005   | 2/24/2009  | 11/081335          | US | Hardware Based Memory Scrubbing                                                                                                                     |
| 82201052     | Granted     | 8307259       | 1/5/2009    | 11/6/2012  | 12/319266          | US | Hardware Based Memory Scrubbing                                                                                                                     |
| 82209167     | Granted     | 8244983       | 10/30/2006  | 8/14/2012  | 11/554383          | US | Memory Control Systems With Directory Caches And Methods For Operation Thereof                                                                      |
| 82226147     | Granted     | 7856576       | 4/25/2007   | 12/21/2010 | 11/789683          | US | Method And System For Managing Memory Transactions For Memory Repair                                                                                |
| 82236320     | Granted     | 8176255       | 10/19/2007  | 5/8/2012   | 11/875168          | US | Allocating Space In Dedicated Cache Ways                                                                                                            |
| 82249811     | Granted     | 8539164       | 10/2/2008   | 9/17/2013  | 12/244700          | US | Cache Coherency Within Multiprocessor Computer System                                                                                               |
| 82259108     | Granted     | 8316189       | 12/9/2009   | 41233      | 12/634539          | US | RESCINDING OWNERSHIP OF A CACHE LINE IN A COMPUTER SYSTEM                                                                                           |
| 82852277     | Allowed     |               | 9/25/2009   |            | 13/259127          | US | MAPPING NON-PREFETCHABLE STORAGE LOCATIONS INTO MEMORY MAPED INPUT/OUTPUT SPACE                                                                     |
| 83206139     | Published   |               | 6/28/2013   |            | 13/931286          | US | Dual Inline Memory Module Socket                                                                                                                    |
| 83211346     | Granted     | 9146848       | 4/30/2013   | 9/29/2015  | 13/873567          | US | Link Training for a Serdes Link                                                                                                                     |
| 82202609     | Application |               | 1/31/2005   |            | 11/048358          | US | System And Method For Selecting Members Of A Portfolio                                                                                              |
| 82202612     | Granted     | 8738417       | 4/18/2005   | 5/27/2014  | 11/108396          | US | Method And Apparatus For Product Management                                                                                                         |
| 82220345     | Application |               | 10/31/2006  |            | 11/590006          | US | System And Method For Creating A Value-based Visualization                                                                                          |

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| 82255988     | Granted     | 8595051       | 12/24/2003  | 11/26/2013 | 10/7/45989         | US | METRICS CAPABILITY SELF ASSESSMENT                                                                              |
| 82256675     | Granted     | 7613/04       | 1/19/2005   | 11/3/2009  | 11/039389          | US | ENTERPRISE DIGITAL ASSET MANAGEMENT SYSTEM AND METHOD                                                           |
| 82257173     | Granted     | 8332331       | 3/19/2007   | 12/11/2012 | 11/688094          | US | Determining a Price Premium for a Project                                                                       |
| 82257551     | Granted     | 8577712       | 5/2/2008    | 11/5/2013  | 12/114550          | US | ASSESSING RISK                                                                                                  |
| 82257554     | Published   |               | 7/28/2008   |            | 12/180703          | US | ENTERPRISE ASSET MANAGEMENT                                                                                     |
| 82257797     | Granted     | 8255309       | 7/20/2009   | 8/28/2012  | 12/505708          | US | VALUATING INTELLECTUAL ASSETS                                                                                   |
| 82257800     | Published   |               | 7/29/2009   |            | 12/511547          | US | INDICATING RELATIONSHIPS AMONG TEXT DOCUMENTS INCLUDING A PATENT BASED ON CHARACTERISTICS OF THE TEXT DOCUMENTS |
| 82261046     | Published   |               | 4/29/2010   |            | 12/770675          | US | Offer Conversion                                                                                                |
| 82263353     | Published   |               | 5/27/2010   |            | 12/789314          | US | Flexible Extended Product Warranties Having Partially Refundable Premiums                                       |
| 82264730     | Published   |               | 9/29/2010   |            | 12/893795          | US | NET UTILITY DETERMINATION BASED ON PRODUCT REPLACEMENT AND SERVICE PLAN COVERAGE DECISIONS                      |
| 82578678     | Published   |               | 3/11/2011   |            | 13/045764          | US | RESOURCE SKILL COMPLIANCE OPTIMIZATION                                                                          |
| 82748347     | Published   |               | 10/27/2011  |            | 13/282714          | US | COMPARING CONTRACTS WITH DIFFERENT LENGTHS USING UNCERTAINTY INFORMATION                                        |
| 82964777     | Published   |               | 7/12/2012   |            | 13/547804          | US | DETERMINING PRODUCT PRICE                                                                                       |
| 83235193     | Granted     | 9049236       | 10/22/2010  | 6/2/2015   | 13/880078          | US | DISTRIBUTED NETWORK INSTRUMENTATION SYSTEM                                                                      |
| 83516154     | Published   |               | 3/11/2011   |            | 13/983049          | US | RESOURCE PLANNING USING FULL TIME EQUIVALENTS                                                                   |
| 84310702     | Application |               | 1/31/2013   |            | 14/759945          | US | PREDICTIVE CACHE APPARATUS AND METHOD OF CACHE PREDICTION                                                       |
| 82077560     | Granted     | 6061665       | 6/6/1997    | 5/9/2000   | 08/870311          | US | SYSTEM , METHOD AND ARTICLE OF MANUFACTURE FOR DYNAMIC NEGOTIATION OF A NETWORK PAYMENT FRAMEWORK               |
| 82214534     | Granted     | 8689056       | 10/31/2005  | 4/1/2014   | 11/263147          | US | Method And System For Providing Customer Service Information                                                    |
| 82251680     | Granted     | 6839679       | 3/18/1996   | 1/4/2005   | 08/618005          | US | Automated Travel Pricing System                                                                                 |
| 82251683     | Granted     | 7146327       | 7/1/1996    | 12/5/2006  | 08/673986          | US | Electronic Publication Distribution Method And System                                                           |
| 82253621     | Granted     | 6696660       | 7/20/2001   | 38041      | 09/910394          | US | Method and System for Weld Process Monitoring                                                                   |
| 82253804     | Granted     | 8775194       | 10/7/2005   | 41828      | 11/246599          | US | SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR CONTEXT-BASED BUSINESS PROCESS MANAGEMENT                      |
| 82255430     | Granted     | 5801366       | 3/28/1996   | 9/1/1998   | 08/623439          | US | Automated System And Method For Point-of-sale (POS) Check Processing                                            |
| 82256054     | Published   |               | 12/8/2003   |            | 10/730228          | US | BILL PAYMENT AUTHORIZATION SYSTEM AND METHOD                                                                    |
| 82256177     | Granted     | 7618259       | 5/13/2004   | 40134      | 10/845273          | US | WORKSHEET WIZARD - SYSTEM AND METHOD FOR CREATING EDUCATIONAL WORKSHEETS                                        |
| 82256552     | Granted     | 6977612       | 6/29/2004   | 12/20/2005 | 10/879711          | US | System and Method for Wireless Asset Tracking                                                                   |
| 82257239     | Published   |               | 7/16/2007   |            | 11/778521          | US | Quality Assurance System And Method                                                                             |

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| 82257611     | Granted     | 8543331       | 7/3/2008    | 9/24/2013  | 12/167963          | US | APPARATUS, AND ASSOCIATED METHOD, FOR PLANNING AND DISPLAYING A ROUTE PATH                               |
| 82257677     | Published   |               | 7/23/2008   |            | 12/178428          | US | APPARATUS, AND ASSOCIATED METHOD, FOR APPROVING PASSAGE OF A VEHICLE THROUGH A VEHICULAR CHECKPOINT      |
| 82070693     | Published   |               | 6/7/2002    |            | 10/163877          | US | Process For Personalizing A Transaction Through An Internet Or Intranet Network                          |
| 82176575     | Granted     | 7881837       | 4/23/2004   | 2/1/2011   | 10/599529          | US | Diagnostic Apparatus And Method                                                                          |
| 82252058     | Granted     | 6195765       | 1/5/1998    | 2/27/2001  | 09/002591          | US | System and Method for Testing an Application Program                                                     |
| 82252121     | Granted     | 6134545       | 1/30/1998   | 10/17/2000 | 09/016558          | US | Method and System for Processing a Query                                                                 |
| 82252496     | Granted     | 5721929       | 10/6/1995   | 2/24/1998  | 08/539515          | US | Method For Extending A Fourth Generation Programming Language                                            |
| 82252868     | Granted     | 5805798       | 10/29/1996  | 9/8/1998   | 08/741149          | US | Fail-safe Event Driven Transaction Processing System And Method                                          |
| 82256180     | Application |               | 4/1/2004    |            | 10/815548          | US | SYSTEM AND METHOD FOR WEB SERVICES DELIVERY                                                              |
| 82256237     | Granted     | 7664759       | 5/18/2004   | 2/16/2010  | 10/847759          | US | METHOD AND SYSTEM FOR STORING SELF-DESCRIPTIVE TABULAR DATA WITH ALPHANUMERIC AND BINARY VALUES          |
| 82257617     | Published   |               | 7/29/2008   |            | 12/181743          | US | VIRTUALIZATION INFRASTRUCTURE MANAGEMENT ENVIRONMENT                                                     |
| 82257674     | Granted     | 8321226       | 8/8/2008    | 11/27/2012 | 12/188828          | US | GENERATING SPEECH-ENABLED USER INTERFACES                                                                |
| 82848367     | Published   |               | 5/8/2009    |            | 13/319387          | US | ACCESS CONTROL OF DISTRIBUTED COMPUTING RESOURCES SYSTEM AND METHOD                                      |
| 83127161     | Published   |               | 6/22/2010   |            | 13/704955          | US | A METHOD AND SYSTEM FOR DETERMINING A DEPLOYMENT OF APPLICATIONS                                         |
| 82161842     | Granted     | 6154828       | 2/24/2000   | 11/28/2000 | 08/072632          | US | METHOD AND APPARATUS FOR EMPLOYING A CYCLE BIT TO INDICATE COMPLETION OF PARALLEL EXECUTING INSTRUCTIONS |
| 82164779     | Granted     | 5563096       | 11/20/1995  | 35346      | 08/560853          | US | SEMICONDUCTOR DEVICE FABRICATION WITH PLANAR GATE INTERCONNECT SURFACE                                   |
| 82165211     | Granted     | 5986868       | 12/4/1998   | 11/16/1999 | 09/206019          | US | INPUT AND OUTPUT NOISE REDUCTION CIRCUIT                                                                 |
| 82165277     | Granted     | 5884050       | 6/21/1996   | 3/16/1999  | 08/668200          | US | MECHANISM FOR HIGH BANDWIDTH DMA TRANSFERS IN A PCI ENVIRONMENT                                          |
| 82165280     | Granted     | 5968153       | 10/13/1998  | 10/19/1999 | 09/170812          | US | MECHANISM FOR HIGH BANDWIDTH DMA TRANSFERS IN A PCI ENVIRONMENT                                          |
| 82165337     | Granted     | 6012120       | 3/18/1999   | 1/4/2000   | 09/271558          | US | METHOD AND APPARATUS FOR PROVIDING DMA TRANSFERS BETWEEN DEVICES COUPLED TO DIFFERENT HOST BUS BRIDGES   |
| 82165340     | Granted     | 6021456       | 11/12/1996  | 2/1/2000   | 08/747473          | US | METHOD FOR COMMUNICATING INTERRUPT DATA STURCTURE IN MULTI-PROCESSOR COMPUTER SYSTEM                     |

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| 82165589     | Granted     | 6105108       | 10/24/1997  | 8/15/2000  | 08/957509          | US | METHOD AND APPARATUS FOR RELEASING VICTIM DATA<br>BUFFERS OF COMPUTER SYSTEMS USING VICTIM RELEASE<br>COUNTERS            |
| 82166339     | Granted     | 6831544       | 10/9/2003   | 12/14/2004 | 10/682560          | US | APPARATUS AND METHOD FOR PCB WINDING PLANAR<br>MAGNETIC DEVICES                                                           |
| 82174766     | Granted     | 7102883       | 12/19/2003  | 9/5/2006   | 10/742043          | US | Memory Package                                                                                                            |
| 82179509     | Granted     | 7450400       | 12/8/2004   | 11/11/2008 | 11/007095          | US | Electronic System And Method                                                                                              |
| 82179512     | Granted     | 7444540       | 6/21/2005   | 10/28/2008 | 11/158187          | US | Memory Mirroring Apparatus And Method                                                                                     |
| 82183760     | Granted     | 7545651       | 4/18/2005   | 6/9/2009   | 11/108245          | US | Memory Module With A Predetermined Arrangement Of<br>Lines                                                                |
| 82184690     | Granted     | 7617596       | 9/6/2007    | 11/17/2009 | 11/850952          | US | METHOD OF FORMING A HOUSING FOR AN ELECTRONIC<br>DEVICE                                                                   |
| 82187561     | Granted     | 7519973       | 9/29/2004   | 4/14/2009  | 10/951956          | US | PROVIDING UNIQUE EVENT NOTIFICATION TO ENABLE<br>FIRMWARE TO REQUEST THAT AN OPERATING SYSTEM<br>PERFORM A UNIQUE ACTION  |
| 82190312     | Allowed     |               | 1/28/2005   |            | 11/046633          | US | Information Technology (IT) Equipment Positioning System                                                                  |
| 82191062     | Granted     | 7330119       | 4/29/2005   | 2/12/2008  | 11/117803          | US | Remote Measurement Employing RFID                                                                                         |
| 82198487     | Granted     | 7516359       | 10/25/2004  | 39910      | 10/972835          | US | System And Method For Using Information Relating To A<br>Detected Loss Of Lockstep For Determining A Responsive<br>Action |
| 82202732     | Granted     | 7533303       | 4/15/2005   | 39945      | 11/107034          | US | Method And System For Performing System-level Correction<br>Of Memory Errors                                              |
| 82203176     | Granted     | 7826229       | 10/27/2006  | 11/2/2010  | 11/588817          | US | Component Retention With Distributed Compression                                                                          |
| 82203425     | Granted     | 7568090       | 6/23/2005   | 7/28/2009  | 11/159757          | US | Speedy Boot For Computer Systems                                                                                          |
| 82209605     | Granted     | 7349200       | 9/21/2005   | 3/25/2008  | 11/232280          | US | Latching Mechanism                                                                                                        |
| 82210229     | Granted     | 7473846       | 3/29/2006   | 1/6/2009   | 11/392113          | US | Reversible Cable Support Arm                                                                                              |
| 82213346     | Granted     | D569347       | 3/30/2006   | 5/20/2008  | 29/257169          | US | Electronic Module Retainer                                                                                                |
| 82214039     | Granted     | 8819348       | 7/12/2006   | 8/26/2014  | 11/485409          | US | Address Masking Between Users                                                                                             |
| 82214597     | Granted     | 7589974       | 4/21/2006   | 9/15/2009  | 11/408859          | US | Modular Server And Method                                                                                                 |
| 82215218     | Granted     | 7658619       | 10/31/2006  | 40218      | 11/590094          | US | Processor And Power Converter Assembly With Rigidly<br>Connected Power Connector                                          |
| 82220276     | Granted     | D560665       | 7/28/2006   | 1/29/2008  | 29/263796          | US | Retractable And Adjustable Diagnostic Panel                                                                               |
| 82220900     | Granted     | 7738242       | 1/8/2004    | 40344      | 10/754804          | US | System And Method For Displaying Chassis Component<br>Information                                                         |
| 82222280     | Granted     | 7519245       | 10/31/2006  | 39917      | 11/590393          | US | Modular Array Computer With Optical Intercell<br>Communications Pathways                                                  |
| 82233827     | Granted     | 8892942       | 7/27/2007   | 41961      | 11/878860          | US | Rank Sparring System And Method                                                                                           |
| 82235573     | Published   |               | 9/18/2008   |            | 12/233148          | US | IO Card Receiving Unit                                                                                                    |
| 82241258     | Application |               | 10/28/2008  |            | 12/259395          | US | SYSTEM AND METHOD FOR VISUALLY INDICATING<br>PARTITIONS OF A PARTITIONABLE COMPUTER SYSTEM                                |

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| 82243628     | Granted     | 6560096       | 10/31/2000  | 37747      | 09/699683          | US | Multiple Server Configuration Within A Single Server Housing                                                        |
| 82250744     | Granted     | 8276000       | 10/28/2009  | 41177      | 12/607848          | US | System And Method For Supplying Power To A Load Using Deep-sleep-mode Power Supplies                                |
| 82251056     | Granted     | 8301316       | 1/25/2010   | 41212      | 12/693124          | US | SYSTEM AND METHOD FOR ORIENTING A BAFFLE PROXIMATE AN ARRAY OF FANS THAT COOL ELECTRONIC COMPONENTS                 |
| 82262795     | Granted     | 8154866       | 4/19/2010   | 41009      | 12/762738          | US | Single Rotor Ducted Fan                                                                                             |
| 82672014     | Granted     | 8542488       | 1/29/2009   | 9/24/2013  | 13/146884          | US | COOLING APPARATUS FOR AN IC (as amended)                                                                            |
| 82846947     | Granted     | D673160       | 10/13/2011  | 12/25/2012 | 29/404001          | US | Cover Plate for A Computing Device                                                                                  |
| 82868507     | Granted     | D682280       | 12/7/2011   | 5/14/2013  | 29/408110          | US | Security Bezel for a Computing Device                                                                               |
| 82938248     | Published   |               | 2/18/2010   |            | 13/387041          | US | A SYSTEM AND METHOD FOR DYNAMICALLY ALLOCATING HIGH-QUALITY AND LOW-QUALITY FACILITY ASSETS AT THE DATACENTER LEVEL |
| 83096258     | Granted     | 9140373       | 12/21/2012  | 9/22/2015  | 13/724085          | US | THERMALLY ACTUATED VALVE                                                                                            |
| 83220875     | Allowed     |               | 4/3/2013    |            | 13/855986          | US | MANAGING MULTIPLE CARTRIDGES THAT ARE ELECTRICALLY COUPLED TOGETHER                                                 |
| 83852687     | Application |               | 4/1/2014    |            | 29/486630          | US | BEZEL WITH DOCKING RECESS                                                                                           |
| 84106366     | Application |               | 6/27/2012   |            | 14/410568          | US | BATTERY TO PROVIDE VOLTAGE TO POWER MODULES                                                                         |
| 84292929     | Application |               | 1/31/2013   |            | 14/764341          | US | LIQUID COOLING                                                                                                      |
| 84313055     | To Be Filed |               | 1/23/2013   |            | 14/761339          | US | LATCH TO GENERATE POSITIVE LOCKING LATCH RETENTION FORCE                                                            |
| 90024655     | Application |               | 8/10/2015   |            | 14/822281          | US | A System Including A Module                                                                                         |
| 90045050     | Application |               | 3/28/2013   |            | 14/781024          | US | CONVERTERS TO PROVIDE LIGHT LOAD OUTPUT                                                                             |
| 90049332     | Application |               | 3/26/2013   |            | 14/780521          | US | TOP LOADING CARTRIDGE                                                                                               |
| 90049358     | Application |               | 3/26/2013   |            | 14/780520          | US | TOP LOADING CARTRIDGE                                                                                               |
| 81951386     | Granted     | 6381690       | 8/1/1995    | 4/30/2002  | 08/509867          | US | Processor For Performing Subword Permutations And Combinations                                                      |
| 81967865     | Granted     | 6208565       | 2/18/2000   | 3/27/2001  | 09/507333          | US | Multi-ported register structure utilizing a pulse write mechanism                                                   |
| 81972050     | Granted     | 6647517       | 4/27/2000   | 11/11/2003 | 09/561599          | US | APPARATUS AND METHOD FOR PROVIDING ERROR ORDERING INFORMATION AND ERROR LOGGING INFORMATION                         |
| 81972053     | Granted     | 7103672       | 5/1/2000    | 9/5/2006   | 09/562308          | US | Method And Apparatus For Improving System Performance Through Remote Credit Management                              |
| 81988655     | Granted     | 7035928       | 4/25/2001   | 4/25/2006  | 09/842969          | US | Allocating Computer Resources For Efficient Use By A Program                                                        |

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| 82000952     | Granted | 7028167       | 3/4/2002    | 4/11/2006  | 10/091084          | US | Core Parallel Execution With Different Optimization Characteristics To Decrease Dynamic Execution Path                       |
| 82013501     | Granted | 5754458       | 5/30/1996   | 5/19/1998  | 08/655581          | US | Trailing Bit Anticipator                                                                                                     |
| 82013504     | Granted | 5798938       | 7/2/1996    | 8/25/1998  | 08/677432          | US | System And Method For Verification Of A Precharge Critical Path For A System Of Cascaded Dynamic Logic Gates                 |
| 82013507     | Granted | 5740087       | 5/31/1996   | 4/14/1998  | 08/656125          | US | Apparatus And Method For Regulating Power Consumption In A Digital System                                                    |
| 82015130     | Granted | 5796997       | 5/15/1996   | 8/18/1998  | 08/647539          | US | FAST NULLIFY SYSTEM AND METHOD FOR TRANSFORMING A NULLIFY FUNCTION INTO A SELECT FUNCTION                                    |
| 82016441     | Granted | 6131156       | 11/3/1998   | 10/10/2000 | 09/185299          | US | Optimized Storage System And Method For A Processor That Executes Instructions Out Of Order                                  |
| 82020182     | Granted | 5644609       | 7/31/1996   | 7/1/1997   | 08/690466          | US | Apparatus And Method For Reading And Writing Remote Registers On An Integrated Circuit Chip Using A Minimum Of Interconnects |
| 82024739     | Granted | 5944843       | 8/21/1997   | 8/31/1999  | 08/918696          | US | Method And Apparatus For Using The Unused Bits Of A Data Packet To Transmit Additional Information                           |
| 82024994     | Granted | 6312973       | 3/21/2001   | 11/6/2001  | 09/813761          | US | IC Die Power Connection Using Canted Coil Spring                                                                             |
| 82032293     | Granted | 6141674       | 6/10/1998   | 10/31/2000 | 09/095533          | US | Reducing The Hardware Cost Of A Bank Of Multipliers By Combining Shared Terms                                                |
| 82038101     | Granted | 6161215       | 8/31/1998   | 12/12/2000 | 09/144299          | US | Package Routing Of Integrated Circuit Signals                                                                                |
| 82052147     | Granted | 7281147       | 8/20/2003   | 10/9/2007  | 10/644184          | US | Systems And Methods For Variable Control Of Power Dissipation In A Pipelined Processor                                       |
| 82057457     | Granted | 6233152       | 8/9/2000    | 5/15/2001  | 09/634222          | US | Circuit Board Mounting Assembly And Method                                                                                   |
| 82078934     | Granted | 6765446       | 9/18/2002   | 7/20/2004  | 10/251100          | US | FREQUENCY LOCK LOOP HAVING A RELOADABLE COUNTER WITHOUT ROLLOVER                                                             |
| 82084427     | Granted | 7398419       | 12/1/2005   | 7/8/2008   | 11/290504          | US | Method And Apparatus For Seeding Differences In Lock-stepped Processors                                                      |
| 82095911     | Granted | 8452945       | 9/17/2002   | 5/28/2013  | 10/245106          | US | Indirect Indexing Instructions                                                                                               |
| 82099847     | Granted | 7574341       | 11/12/2003  | 8/11/2009  | 10/712855          | US | Speculative Expectation Based Event Verification                                                                             |
| 82100597     | Granted | 7394301       | 6/17/2005   | 7/1/2008   | 11/155064          | US | System And Method For Dynamically Varying A Clock Signal                                                                     |
| 82114709     | Granted | 6453406       | 12/13/1993  | 9/17/2002  | 08/166279          | US | FIBER OPTIC BUS INTERCONNECT                                                                                                 |
| 82119701     | Granted | 7047462       | 1/4/2002    | 5/16/2006  | 10/037541          | US | Method And Apparatus For Providing JTAG Functionality In A Remote Server Management Controller                               |
| 82119764     | Granted | 7167987       | 8/29/2001   | 1/23/2007  | 09/942352          | US | USE OF BIOMETRICS TO PROVIDE PHYSICAL AND LOGIC ACCESS TO COMPUTER DEVICES                                                   |
| 82120766     | Granted | 8051303       | 6/10/2002   | 11/1/2011  | 10/165938          | US | SECURE READ AND WRITE ACCESS TO CONFIGURATION REGISTERS IN COMPUTER DEVICES                                                  |
| 82124948     | Granted | 6182187       | 4/7/1993    | 1/30/2001  | 08/044241          | US | SYSTEM ROM INCLUDING A FLASH EPROM AND A ROM FOR STORING PRIMARY BOOT CODE REPLACING A BLOCK FLASH EPROM                     |

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| 82128632     | Granted | 5933614       | 12/31/1996  | 8/3/1999   | 08/775392          | US | ISOLATION OF PCI AND EISA MASTERS BY MASKING COMMANDS AND INTERRUPT LINES                                                                                 |
| 82128815     | Granted | 6201789       | 12/30/1996  | 3/13/2001  | 08/774524          | US | NETWORK SWITCH WITH DYNAMIC BACKPRESSURE PER PORT                                                                                                         |
| 82128818     | Granted | 6098110       | 12/30/1996  | 8/1/2000   | 08/777501          | US | NETWORK SWITCH WITH A MULTIPLE BUS STRUCTURE AND A BRIDGE INTERFACE FOR TRANSFERRING NETWORK DATA BETWEEN DIFFERENT BUSES                                 |
| 82133312     | Granted | 6792553       | 12/29/2000  | 9/14/2004  | 09/751506          | US | A METHOD FOR SEQUENTIALLY POWERING ON EACH OF A PLURALITY OF PROCESSORS AFTER THE POWER SUPPLY AND VRMS ASSOCIATED WITH EACH PROCESSOR HAVE BECOME STABLE |
| 82135244     | Granted | 6160809       | 12/17/1997  | 12/12/2000 | 08/992453          | US | DISTRIBUTED PACKET DATA WITH CENTRALIZED SNOOPING AND HEADER PROCESSING ROUTER                                                                            |
| 82135934     | Granted | 6167508       | 6/2/1998    | 36886      | 09/088818          | US | REGISTER SCOREBOARD LOGIC WITH REGISTER READ AVAILABILITY SIGNAL TO REDUCE INSTRUCTION ISSUE ARBITRATION LATENCY                                          |
| 82136306     | Granted | 6133760       | 12/8/1999   | 10/17/2000 | 09/457603          | US | METHOD AND APPARATUS FOR A FAST VARIABLE PRECEDENCE PRIORITY ENCODER WITH OPTIMIZED ROUND ROBIN PRECEDENCE UPDATE SCHEME                                  |
| 82165217     | Granted | 6130878       | 12/27/1995  | 36809      | 08/579393          | US | METHOD AND APPARATUS FOR RATE-BASED SCHEDULING USING A RELATIVE ERROR APPROACH                                                                            |
| 82165403     | Granted | 6091897       | 3/5/1999    | 36725      | 08/593588          | US | FAST TRANSLATION AND EXECUTION OF A COMPUTER PROGRAM ON A NON-NATIVE ARCHITECTURE BY USE OF BACKGROUND TRANSLATOR                                         |
| 82165652     | Granted | 6088771       | 10/24/1997  | 36718      | 08/957501          | US | MECHANISM FOR REDUCING LATENCY OF MEMORY BARRIER OPERATIONS ON A MULTIPROCESSOR SYSTEM                                                                    |
| 82173020     | Granted | 7447919       | 4/6/2004    | 11/4/2008  | 10/818974          | US | Voltage Modulation For Increased Reliability In An Integrated Circuit                                                                                     |
| 82177760     | Granted | 8224987       | 3/11/2005   | 7/17/2012  | 11/078851          | US | System And Method For A Hierarchical Interconnect Network                                                                                                 |
| 82180943     | Granted | 7600023       | 11/5/2004   | 10/6/2009  | 10/982658          | US | Systems And Methods Of Balancing Crossbar Bandwidth                                                                                                       |
| 82180949     | Granted | 7349982       | 1/12/2004   | 3/25/2008  | 10/756433          | US | Enablement Of Route Table Entries                                                                                                                         |
| 82206983     | Granted | 7844838       | 10/30/2006  | 11/30/2010 | 11/589573          | US | INTER-DIE POWER MANAGER AND POWER MANAGEMENT METHOD                                                                                                       |
| 82208855     | Granted | 7903556       | 11/3/2005   | 3/8/2011   | 11/266549          | US | METHOD OF CONTROLLING DATA TRANSFERS BETWEEN NODES IN A COMPUTER SYSTEM                                                                                   |
| 82217720     | Granted | 8296849       | 10/31/2006  | 10/23/2012 | 11/590420          | US | Method And Apparatus For Removing Homogeneity From Execution Environment Of Computing System                                                              |
| 82240631     | Granted | 8520686       | 5/8/2008    | 8/27/2013  | 12/989336          | US | A Method For Interfacing A Fibre Channel Network With An Ethernet Based Network                                                                           |

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| 82240940     | Granted     | 7521972       | 9/25/2007   | 4/21/2009  | 11/903950 US       | US | Fifty Percent Duty Cycle Clock Divider Circuit And Method                                                                                    |
| 82264109     | Published   |               | 11/15/2010  |            | 12/946540 US       | US | SYSTEMS, DEVICES, AND METHODS FOR MULTIPLE HOST MANAGEMENT                                                                                   |
| 82672080     | Granted     | 8661235       | 10/8/2008   | 2/25/2014  | 13/123194 US       | US | Firmware Storage Medium With Customized Image                                                                                                |
| 83931742     | Published   |               | 6/25/2014   |            | 14/314696 US       | US | Packet routing within server device enclosure                                                                                                |
| 84076459     | Published   |               | 7/30/2012   |            | 14/395889 US       | US | Detecting Defects in a Processor Socket                                                                                                      |
| 90028940     | Application |               | 4/3/2013    |            | 14/777124 US       | US | Cartridge Interdependence Switch                                                                                                             |
| 81967115     | Granted     | 7181582       | 9/11/2003   | 2/20/2007  | 10/660192 US       | US | Unified Data Sets Distributed Over Multiple I/o-device Arrays                                                                                |
| 81976049     | Granted     | 6904441       | 3/27/2001   | 6/7/2005   | 09/819265 US       | US | Method And Apparatus For Providing File System Access To A Disk Array                                                                        |
| 81990905     | Granted     | 6603657       | 6/29/2001   | 8/5/2003   | 09/896478 US       | US | Systems For Mounting Data Storage Devices                                                                                                    |
| 82003640     | Granted     | 7480815       | 6/10/2005   | 1/20/2009  | 11/150796 US       | US | Controller Communications Over An Always-on Controller Interconnect                                                                          |
| 82037663     | Granted     | 6223267       | 2/26/1998   | 4/24/2001  | 09/031504 US       | US | DYNAMICALLY ALLOCABLE RAM DISK                                                                                                               |
| 82040726     | Granted     | 6065087       | 5/21/1998   | 5/16/2000  | 09/082738 US       | US | ARCHITECTURE FOR A HIGH-PERFORMANCE NETWORK/BUS MULTIPLEXER INTERCONNECTING A NETWORK AND A BUS THAT TRANSPORT DATA USING MULTIPLE PROTOCOLS |
| 82052585     | Granted     | 7213165       | 9/22/2003   | 5/1/2007   | 10/667949 US       | US | Host I/O Performance And Availability Of A Storage Array During Rebuild By Prioritizing I/O Requests                                         |
| 82064078     | Granted     | 6851037       | 7/1/2002    | 2/1/2005   | 10/185725 US       | US | METHOD OF UTILISATION OF A DATA STORAGE ARRAY, AND ARRAY CONTROLLER THEREFOR                                                                 |
| 82080809     | Granted     | 7089395       | 10/3/2002   | 8/8/2006   | 10/264957 US       | US | Computer Systems, Virtual Storage Systems And Virtual Storage System Operational Methods                                                     |
| 82085549     | Granted     | 6898664       | 8/28/2002   | 5/24/2005  | 10/233107 US       | US | Optimizing Performance For A Storage Device Within A Computer System                                                                         |
| 82090796     | Granted     | 6810439       | 2/18/2003   | 10/26/2004 | 10/370327 US       | US | System And Method To Monitor Connections To A Device                                                                                         |
| 82095791     | Granted     | 6820146       | 10/1/2002   | 11/16/2004 | 10/260291 US       | US | Filter Driver For Blocking Access By Host To Devices                                                                                         |
| 82098533     | Granted     | 7308599       | 6/9/2003    | 12/11/2007 | 10/457892 US       | US | METHOD AND APPARATUS FOR DATA RECONSTRUCTION AFTER FAILURE OF A STORAGE DEVICE IN A STORAGE ARRAY                                            |
| 82106093     | Granted     | 7231544       | 2/27/2003   | 6/12/2007  | 10/376957 US       | US | Restoring Data From Point-in-time Representations Of The Data                                                                                |
| 82107278     | Granted     | D455153       | 12/22/2000  | 4/2/2002   | 29/134619 US       | US | SANWORKS MANAGEMENT APPLIANCE BEZEL                                                                                                          |
| 82119950     | Granted     | 6889345       | 10/19/2001  | 5/3/2005   | 10/004374 US       | US | System And Method For Locating A Failed Storage Device In A Data Storage System                                                              |
| 82120139     | Granted     | 6948036       | 6/21/2002   | 38615      | 10/177274 US       | US | System And Method For Providing Multi-initiator Capability To An ATA Drive                                                                   |

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| 82120142     | Granted   | 6961813       | 2/25/2003   | 11/1/2005  | 10/373969          | US | System And Method For Providing Multi-initiator Capability To An ATA Drive                                                           |
| 82120697     | Granted   | 7111084       | 12/28/2001  | 9/19/2006  | 10/035660          | US | Data Storage Network With Host Transparent Failover Controlled By Host Bus Adapter                                                   |
| 82120700     | Granted   | 6983303       | 1/31/2002   | 1/3/2006   | 10/061956          | US | STORAGE AGGREGATOR FOR ENHANCING VIRTUALIZATION IN DATA STORAGE NETWORKS                                                             |
| 82126877     | Granted   | 6058489       | 8/20/1998   | 5/2/2000   | 09/137801          | US | ON-LINE DISK ARRAY RECONFIGURATION                                                                                                   |
| 82132748     | Granted   | 6675244       | 2/18/2000   | 1/6/2004   | 09/507000          | US | SCSI DATA RATE SPEED DETERMINATION                                                                                                   |
| 82133372     | Granted   | 6311232       | 7/29/1999   | 10/30/2001 | 09/363439          | US | METHOD AND APPARATUS FOR CONFIGURING STORAGE DEVICES                                                                                 |
| 82134806     | Granted   | 5868261       | 11/15/1996  | 2/9/1999   | 08/749466          | US | ANTI-SLAMMING LATCH APPARATUS FOR MODULAR COMPONENT INSTALLATIONS                                                                    |
| 82161533     | Granted   | 6269453       | 6/29/1993   | 7/31/2001  | 08/084370          | US | METHOD FOR REORGANIZING THE DATA ON A RAID-4 OR RAID-5 ARRAY IN THE ABSENCE OF ONE DISK                                              |
| 82176701     | Granted   | 7305520       | 1/30/2004   | 12/4/2007  | 10/769380          | US | Storage System With Capability To Allocate Virtual Storage Segments Among A Plurality Of Controllers                                 |
| 82186442     | Granted   | 7590522       | 6/14/2004   | 9/15/2009  | 10/867524          | US | Virtual Mass Storage Device For Server Management Information                                                                        |
| 82191563     | Granted   | 7647465       | 1/31/2005   | 1/12/2010  | 11/045253          | US | Storage-system-portion Sufficiency Determination                                                                                     |
| 82191746     | Granted   | 8984140       | 12/14/2004  | 42080      | 11/012510          | US | Managing Connections Through An Aggregation Of Network Resources Providing Offloaded Connections Between Applications Over A Network |
| 82195553     | Granted   | 7518854       | 9/30/2004   | 4/14/2009  | 11/836263          | US | REMOVABLE STORAGE MODULES                                                                                                            |
| 82196807     | Published |               | 2/1/2005    |            | 11/048526          | US | Monitoring Path Connectivity Between Teamed Network Resources Of A Computer System And A Core Network                                |
| 82204361     | Granted   | 8688800       | 10/5/2005   | 4/1/2014   | 11/243848          | US | Remote Configuration Of Persistent Memory System ATT Tables                                                                          |
| 82205795     | Granted   | 7644168       | 7/13/2005   | 1/5/2010   | 11/180145          | US | SAS Expander                                                                                                                         |
| 82206230     | Granted   | 7340551       | 11/15/2005  | 3/4/2008   | 11/274607          | US | Bridge Permitting Access By Multiple Hosts To A Single Ported Storage Drive                                                          |
| 82212971     | Granted   | 7302539       | 4/20/2005   | 11/27/2007 | 11/111090          | US | Migrating Data In A Storage System                                                                                                   |
| 82215599     | Granted   | 7958343       | 9/8/2006    | 40701      | 11/517778          | US | BIOS BOOTABLE RAID SUPPORT                                                                                                           |
| 82225649     | Granted   | 7934027       | 1/19/2007   | 40659      | 11/655456          | US | CRITICAL RESOURCE MANAGEMENT                                                                                                         |
| 82231454     | Granted   | 8260132       | 3/26/2007   | 41156      | 11/728485          | US | SYSTEM AND METHOD FOR CABLE MONITORING                                                                                               |
| 82231457     | Granted   | 7757936       | 7/31/2007   | 7/20/2010  | 11/830922          | US | System And Method For Cable Monitoring                                                                                               |
| 82236701     | Granted   | 9110597       | 8/25/2008   | 8/18/2015  | 12/197827          | US | Data Processing Method And System                                                                                                    |
| 82240697     | Granted   | 8201018       | 9/18/2007   | 6/12/2012  | 11/857335          | US | Control Of Sparring In Storage Systems                                                                                               |
| 82244504     | Granted   | 8041543       | 12/11/2008  | 10/18/2011 | 12/332358          | US | Input/output Workload Analysis Method And System For A Storage Area Network                                                          |

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| 82248125     | Published |               | 6/9/2009    |            | 12/481139          | US | SYSTEM AND METHOD FOR OPERATING A COMMUNICATION LINK                                                                              |
| 82249184     | Granted   | 8244934       | 11/24/2009  | 8/14/2012  | 12/625117          | US | DATA STORAGE NETWORK MANAGEMENT                                                                                                   |
| 82250000     | Published |               | 7/11/2009   |            | 12/501412          | US | Data Replication                                                                                                                  |
| 82250120     | Granted   | 8732339       | 3/24/2009   | 4/17/09    | 12/409493          | US | NPV AT STORAGE DEVICES                                                                                                            |
| 82257926     | Granted   | 7529816       | 6/3/2005    | 5/5/2009   | 10/908993          | US | System For Providing Multi-path Input/output In A Clustered Data Storage Network                                                  |
| 82257929     | Granted   | 7865588       | 6/3/2005    | 1/4/2011   | 12/414042          | US | System For Providing Multi-path Input/output In A Clustered Data Storage Network                                                  |
| 82259489     | Granted   | 8693865       | 1/11/2010   | 4/17/37    | 12/685502          | US | Network Security Using Optical Attenuation Data                                                                                   |
| 82259861     | Published |               | 5/26/2010   |            | 12/787642          | US | MIGRATING WRITE INFORMATION IN A WRITE CACHE OF A STORAGE SYSTEM                                                                  |
| 82262168     | Published |               | 6/30/2010   |            | 12/827028          | US | Storage Virtualization                                                                                                            |
| 82262174     | Published |               | 6/21/2010   |            | 12/819312          | US | Prioritizing Input/Outputs At A Host Bus Adapter                                                                                  |
| 82578744     | Granted   | 7802153       | 12/7/2006   | 9/21/2010  | 11/608241          | US | Trainable Link                                                                                                                    |
| 82578781     | Granted   | 7191304       | 9/4/2003    | 39154      | 10/655963          | US | Efficient and Reliable Virtual Volume Mapping                                                                                     |
| 82578801     | Granted   | 6833634       | 1/4/2001    | 12/21/2004 | 09/755285          | US | Disk Enclosure With Multiple Power Domains                                                                                        |
| 82578847     | Granted   | 7415553       | 8/12/2005   | 39679      | 11/202671          | US | Automatic Cluster Join Protocol                                                                                                   |
| 82578867     | Granted   | 7457175       | 10/23/2006  | 39777      | 11/552107          | US | Dual Data Rate Memory Strobe Checker                                                                                              |
| 82578907     | Granted   | 8103754       | 5/2/2002    | 40932      | 10/138990          | US | Reserving a Shared Volume in a Multiple Node Data Storage System                                                                  |
| 82585717     | Granted   | 8396999       | 5/2/2011    | 41345      | 13/099046          | US | INPUT/OUTPUT HOT SPOT TRACKING                                                                                                    |
| 82831650     | Published |               | 1/17/2012   |            | 13/351331          | US | UNINTERRUPTIBLE POWER SUPPLY CONTROL                                                                                              |
| 82844219     | Granted   | 8484357       | 9/14/2011   | 7/9/2013   | 13/232382          | US | Communication In Multiprocessor Using Proxy Sockets                                                                               |
| 82848221     | Granted   | 9021499       | 1/10/2012   | 4/28/2015  | 13/346933          | US | MOVING A LOGICAL DEVICE BETWEEN PROCESSOR MODULES IN                                                                              |
|              |           |               |             |            |                    |    | RESPONSE TO IDENTIFYING A VARYING LOAD PATTERN                                                                                    |
| 82899685     | Allowed   |               | 4/30/2012   |            | 13/460115          | US | STORAGE FABRIC ADDRESS BASED DATA BLOCK RETRIEVAL                                                                                 |
| 82961677     | Granted   | 9143416       | 6/19/2012   | 9/22/2015  | 13/527237          | US | EXPANDER DEVICE                                                                                                                   |
| 83010725     | Published |               | 7/26/2012   |            | 13/558388          | US | DE-DUPLICATION USING A PARTIAL DIGEST TABLE                                                                                       |
| 83037472     | Granted   | 8856404       | 7/31/2012   | 10/7/2014  | 13/563197          | US | Primitive Group Data Encoding in a Data Storage Fabric                                                                            |
| 83154738     | Granted   | 9064562       | 4/3/2013    | 6/23/2015  | 13/856013          | US | MEMORY MODULE HAVING MULTIPLE MEMORY BANKS SELECTIVELY CONNECTABLE TO A LOCAL MEMORY CONTROLLER AND AN EXTERNAL MEMORY CONTROLLER |
| 83205306     | Published |               | 4/17/2013   |            | 13/864673          | US | AUTOMATIC CLUSTER-BASED FAILOVER HANDLING                                                                                         |
| 83206763     | Granted   | 8830619       | 5/31/2013   | 9/9/2014   | 13/907693          | US | OVERWRITE THRESHOLD NUMBER OF TRACKS                                                                                              |
| 83206783     | Published |               | 4/30/2013   |            | 13/874322          | US | DECRYPT AND ENCRYPT DATA OF STORAGE DEVICE                                                                                        |
| 83213650     | Published |               | 5/30/2013   |            | 13/906287          | US | MODULES TO CONTAIN INTERFACE CARDS                                                                                                |
| 83835910     | Published |               | 9/29/2011   |            | 14/343477          | US | STORAGE RESOURCE ACKNOWLEDGMENTS                                                                                                  |

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| 83952197     | Published   |               | 4/30/2012   |            | 14/368769          | US | PREVENTING A HYBRID MEMORY MODULE FROM BEING MAPPED                                                                                                                           |
| 84288083     | Application |               | 7/28/2015   |            | 14/810,982         | US | SET HEAD FLAG OF REQUEST                                                                                                                                                      |
| 82037600     | Granted     | 6910169       | 9/17/2002   | 6/21/2005  | 10/245260          | US | ECC Code Mechanism To Detect Wire Stuck-At Faults                                                                                                                             |
| 82084055     | Granted     | 6876224       | 11/5/2002   | 4/5/2005   | 10/288174          | US | Method And Apparatus For High Speed Bus Having Adjustable, Symmetrical, Edge-Rate Controlled, Wavefo                                                                          |
| 82104968     | Granted     | 7877647       | 5/23/2003   | 1/25/2011  | 10/444451          | US | CORRECTING A TARGET ADDRESS IN PARALLEL WITH DETERMINING WHETHER THE TARGET ADDRESS WAS RECEIVED IN ERROR                                                                     |
| 82117331     | Granted     | 6775758       | 12/21/2000  | 8/10/2004  | 09/745365          | US | BUFFER PAGE ROLL IMPLEMENTATION FOR PCI-X BLOCK READ TRANSACTIONS                                                                                                             |
| 82127444     | Granted     | 5790870       | 12/15/1995  | 8/4/1998   | 08/573030          | US | BUS ERROR HANDLER FOR PERR# AND SERR# ON DUAL PCI BUS SYSTEM                                                                                                                  |
| 82128563     | Granted     | 5712754       | 4/15/1996   | 1/27/1998  | 08/631963          | US | HOT PLUG PROTECTION SYSTEM                                                                                                                                                    |
| 82128878     | Granted     | 5764925       | 6/27/1996   | 6/9/1998   | 08/671349          | US | MULTIPLE LONG BUS ARCHITECTURE HAVING A NON-TERMINAL TERMINATION ARRANGEMENT                                                                                                  |
| 82128941     | Granted     | 6249830       | 3/21/2000   | 6/19/2001  | 09/532109          | US | Method and apparatus for distributing interrupts in a scalable symmetric multiprocessor system without changing the bus width or bus protocol                                 |
| 82129376     | Granted     | 6128669       | 9/30/1997   | 10/3/2000  | 08/940367          | US | System having a bridge with distributed burst engine to decouple input/output task from a processor                                                                           |
| 82129439     | Granted     | 6098134       | 12/31/1996  | 8/1/2000   | 08/775130          | US | LOCK PROTOCOL FOR PCI BUS USING AN ADDITIONAL "SUPERLOCK" SIGNAL ON THE SYSTEM BUS                                                                                            |
| 82129442     | Granted     | 5881253       | 12/31/1996  | 3/9/1999   | 08/775129          | US | A COMPUTER SYSTEM USING POSTED MEMORY WRITE BUFFERS IN A BRIDGE TO IMPLEMENT SYSTEM MANAGEMENT MODE                                                                           |
| 82130624     | Granted     | 6055582       | 1/16/1998   | 36641      | 09/008702          | US | A SCSI DUPLEX-READY BACKPLANE OF A COMPUTER SYSTEM                                                                                                                            |
| 82130942     | Granted     | 6038633       | 8/15/1997   | 36599      | 08/912096          | US | SYSTEM AND METHOD FOR PROVIDING A DUAL INTERRUPT MECHANISM TO DESIGNATE THE OCCURRENCE AND TERMINATION OF AN EVENT                                                            |
| 82131254     | Granted     | 6175889       | 10/21/1998  | 36907      | 09/177441          | US | APPARATUS, METHOD AND SYSTEM FOR A COMPUTER CPU AND MEMORY TO HIGH SPEED PERIPHERAL INTERCONNECT BRIDGE HAVING A PLURALITY OF PHYSICAL BUSES WITH A SINGLE LOGICAL BUS NUMBER |
| 82132559     | Granted     | 6992541       | 8/29/2002   | 38748      | 10/232552          | US | SINGLE TO DIFFERENTIAL INTERFACING                                                                                                                                            |
| 82132997     | Granted     | 7587542       | 7/28/2005   | 40064      | 11/193590          | US | DEVICE ADAPTED TO SEND INFORMATION IN ACCORDANCE WITH A COMMUNICATION PROTOCOL                                                                                                |
| 82133000     | Granted     | 7464207       | 7/29/2005   | 39791      | 11/192561          | US | Device Operating According To A Communication Protocol                                                                                                                        |

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| 82133186     | Granted     | 8386727       | 12/31/2001  | 41331      | 10/039010          | US | SUPPORTING INTERLEAVED READ/WRITE OPERATIONS FROM/TO MULTIPLE TARGET DEVICES                                      |
| 82169834     | Granted     | 7120717       | 2/13/2004   | 39000      | 10/779017          | US | Method And Apparatus For Controlling Interrupt Storms                                                             |
| 82180508     | Granted     | 7454514       | 1/12/2004   | 11/18/2008 | 10/756441          | US | PROCESSING DATA WITH UNCERTAIN ARRIVAL TIME                                                                       |
| 82181381     | Granted     | 7721159       | 2/11/2005   | 5/18/2010  | 11/056505          | US | Passing Debug Information                                                                                         |
| 82211354     | Granted     | 8391432       | 8/8/2005    | 3/5/2013   | 11/199431          | US | Data Serializer                                                                                                   |
| 82221902     | Granted     | 9053072       | 1/25/2007   | 6/9/2015   | 11/626887          | US | END NODE TRANSACTIONS AT THRESHOLD-PARTIAL FULLNESS OF STORAGE SPACE                                              |
| 82233017     | Granted     | 8464260       | 10/31/2007  | 6/11/2013  | 11/930854          | US | Hardware Device Interface Supporting Transaction Authentication                                                   |
| 82241567     | Granted     | 8386654       | 3/25/2008   | 2/26/2013  | 12/934035          | US | System And Method For Transforming PCIe SR-IOV Functions To Appear As Legacy Functions                            |
| 83984354     | Published   |               | 4/12/2012   |            | 14/369596          | US | RECONFIGURATION OF AN OPTICAL CONNECTION INFRASTRUCTURE                                                           |
| 84056067     | Published   |               | 4/25/2012   |            | 14/387264          | US | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                                 |
| 84116333     | Published   |               | 12/3/2014   |            | 14/559462          | US | CLOCK SIGNALS FOR DYNAMIC RECONFIGURATION OF COMMUNICATION LINK BUNDLES                                           |
| 84264608     | Application |               | 6/11/2015   |            | 14/736647          | US | PRE-BOOT VIDEO SIGNAL                                                                                             |
| 84269669     | Application |               | 1/30/2013   |            | 14/650548          | US | OPTICAL CONNECTOR HAVING A CLEANING ELEMENT                                                                       |
| 82693700     | Published   |               | 8/3/2011    |            | 13/197402          | US | DETECTING SUSPICIOUS NETWORK ACTIVITY USING FLOW SAMPLING                                                         |
| 82964740     | Allowed     |               | 4/12/2012   |            | 13/445374          | US | DYNAMIC PROVISIONING OF VIRTUAL SYSTEMS                                                                           |
| 83629035     | Published   |               | 10/14/2013  |            | 14/053150          | US | DATA FLOW PATH DETERMINATION                                                                                      |
| 82066886     | Granted     | 6052390       | 3/11/1997   | 4/18/2000  | 08/930105          | US | DATA CODE BLOCK TRANSMISSION USING PRESELECTED CONTROL SIGNALS AND DELIMITERS                                     |
| 82092608     | Granted     | 7325183       | 7/21/2004   | 1/29/2008  | 10/896217          | US | Error Correction Code Generation Method And Apparatus                                                             |
| 82136120     | Granted     | 6151629       | 3/2/1998    | 11/21/2000 | 09/033183          | US | TRIGGERED REMOTE DIAL-UP FOR INTERNET ACCESS                                                                      |
| 82267601     | Granted     | 6487196       | 5/29/1998   | 11/26/2002 | 09/093838          | US | System and Method For Simulating Telephone Use In A Network Telephone System                                      |
| 82267727     | Granted     | 5920177       | 2/24/1998   | 7/6/1999   | 09/034142          | US | Autonomously Powered Communications Card modem Having Additional Communications Port For Use As An External Modem |
| 82267793     | Granted     | 5963622       | 7/29/1997   | 10/5/1999  | 08/902403          | US | Mode Signaling Method And Apparatus                                                                               |
| 82267853     | Granted     | 6240464       | 2/4/1998    | 5/29/2001  | 09/018780          | US | METHOD AND SYSTEM FOR MANAGING ADDRESSES FOR NETWORK HOST INTERFACES IN A DATA-OVER-CABLE SYSTEM                  |
| 82268042     | Granted     | 6016346       | 10/21/1997  | 1/18/2000  | 08/955053          | US | LOW-PROFILE SPEAKERPHONE WITH DOWNWARD ORIENTED MICROPHONE CONFIGURATION                                          |
| 82268411     | Granted     | 5912967       | 9/11/1997   | 6/15/1999  | 08/926752          | US | Speaker-Phone Assembly And Method                                                                                 |
| 82268414     | Granted     | 6068235       | 2/26/1998   | 5/30/2000  | 09/032333          | US | Microphone Connector Assembly And Method                                                                          |

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| 82268540     | Granted   | 6189102       | 5/27/1998   | 2/13/2001  | 09/085585 US       | US | METHOD FOR AUTHENTICATION OF NETWORK DEVICES AND DATA-OVER CABLE SYSTEM                                        |
| 82269287     | Granted   | 6249757       | 2/16/1999   | 6/19/2001  | 09/250685 US       | US | SYSTEM FOR DETECTING VOICE ACTIVITY IN A COMMUNICATIONS SIGNAL                                                 |
| 82269416     | Granted   | 6252901       | 4/15/1999   | 6/26/2001  | 09/292295 US       | US | Digital Modem Fast Retrain Escape Mechanism                                                                    |
| 82270412     | Granted   | 6853637       | 5/29/1999   | 2/8/2005   | 09/322887 US       | US | Converged Home Gateway                                                                                         |
| 82270415     | Granted   | 7529229       | 5/17/2004   | 5/5/2009   | 10/847596 US       | US | Converged Home Gateway                                                                                         |
| 82270847     | Granted   | 6446127       | 11/30/1999  | 9/3/2002   | 09/451388 US       | US | System and Method for Providing User Mobility Services in a Telephony Network                                  |
| 82271222     | Granted   | 6898210       | 5/31/2000   | 5/24/2005  | 09/584650 US       | US | System and Method For Providing A Local Area Network Utilizing Remote Transceivers                             |
| 82271534     | Granted   | 6768796       | 2/5/2001    | 38195      | 09/777115 US       | US | System and Method for Echo Cancellation                                                                        |
| 82271726     | Granted   | 6760781       | 2/16/2000   | 38174      | 09/505069 US       | US | Intelligent Packet Transmission Engine                                                                         |
| 82272785     | Granted   | D461813       | 6/30/2000   | 8/20/2002  | 29/125905 US       | US | Concave Push-Button                                                                                            |
| 82272911     | Granted   | D454125       | 9/8/2000    | 3/5/2002   | 29/129244 US       | US | Antenna Design                                                                                                 |
| 82273283     | Granted   | 6771145       | 5/22/2001   | 8/3/2004   | 09/862351 US       | US | Method and Apparatus for Telephone Dialling Using a Network Device                                             |
| 82273412     | Granted   | 6779056       | 7/3/2001    | 8/17/2004  | 09/897044 US       | US | DIRECT DATA PLACEMENT AND MESSAGE REASSEMBLY OF TCP-SEGMENTS UTILIZING A CUMULATIVE ESCAPE DATA SIZE INDICATOR |
| 82273598     | Granted   | 7984110       | 11/2/2001   | 7/19/2011  | 10/004116 US       | US | Method And System For Load Balancing                                                                           |
| 82273907     | Granted   | 7564835       | 11/6/2002   | 7/21/2009  | 10/289948 US       | US | SYSTEM AND METHOD FOR MAXIMIZING THE USE OF BANDWIDTH OPTIMIZATION TECHNIQUES IN VOICE-OVER-PACKET CONNECTIONS |
| 82274159     | Granted   | 7894480       | 8/27/2002   | 2/22/2011  | 10/228492 US       | US | Computer System And Network Interface With Hardware Based Rule Checking For Embedded Firewall                  |
| 82274342     | Granted   | 8539552       | 9/25/2003   | 9/17/2013  | 10/671375 US       | US | SYSTEM AND METHOD FOR NETWORK BASED POLICY ENFORCEMENT OF INTELLIGENT-CLIENT FEATURES                          |
| 82274531     | Granted   | 7526081       | 10/5/2004   | 4/28/2009  | 10/959621 US       | US | Telephone Recording And Storing Arbitrary Keystrokes Sequence With Replay With A Single Stroke                 |
| 82274534     | Granted   | 8218533       | 3/13/2009   | 7/10/2012  | 12/403478 US       | US | Telephone Recording And Storing Arbitrary Keystrokes Sequence With Replay With A Single Stroke                 |
| 82275341     | Granted   | 5805228       | 8/9/1996    | 9/8/1998   | 08/689444 US       | US | VIDEO ENCODER/DECODER SYSTEM                                                                                   |
| 82276469     | Granted   | 7707297       | 10/31/2003  | 4/27/2010  | 10/697951 US       | US | method and associated apparatus for creating a network connection to a network based on bandwidth              |
| 82858623     | Published |               | 1/24/2012   |            | 13/357217 US       | US | CRYPTOGRAPHIC KEY                                                                                              |
| 83191114     | Published |               | 2/7/2013    |            | 13/762187 US       | US | Communications Methods And Appliances                                                                          |
| 82024304     | Granted   | 6247058       | 3/30/1998   | 6/12/2001  | 09/050645 US       | US | METHOD AND APPARATUS FOR PROCESSING NETWORK PACKETS USING TIME STAMPS                                          |

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| 82025306     | Granted | 6038600       | 7/16/1997   | 3/14/2000  | 08/895119          | US | Method And System For Automatic Detection Of Bridge Flooding                                                                               |
| 82028174     | Granted | 6256307       | 3/27/1998   | 7/3/2001   | 09/049762          | US | Repeated Network Device Connections                                                                                                        |
| 82033355     | Granted | 6567403       | 4/30/1998   | 5/20/2003  | 09/070451          | US | Local Area Network Receive Filter                                                                                                          |
| 82035290     | Granted | 6654382       | 10/26/1998  | 11/25/2003 | 09/179103          | US | Virtual-Chassis Switch Network Topology                                                                                                    |
| 82035545     | Granted | 6222854       | 3/19/1998   | 4/24/2001  | 09/044640          | US | Network Device With Logical-Address Learn Mode                                                                                             |
| 82035728     | Granted | 6556541       | 1/11/1999   | 4/29/2003  | 09/228918          | US | Link Monitor State Machine                                                                                                                 |
| 82035731     | Granted | 6947384       | 2/12/2003   | 9/20/2005  | 10/366042          | US | MAC Address Learning And Propagation In Load Balancing Switch Protocols                                                                    |
| 82055021     | Granted | 8072884       | 12/8/2003   | 12/6/2011  | 10/730390          | US | MAC Address Learning And Propagation In Load Balancing Switch Protocols                                                                    |
| 82087982     | Granted | 7145911       | 3/5/2002    | 12/5/2006  | 10/092159          | US | Method And System For Output Flow Control In Network Multiplexers                                                                          |
| 82169150     | Granted | 8891509       | 7/6/2004    | 11/18/2014 | 10/886095          | US | METHOD AND SYSTEM FOR PARALLEL HASH TRANSFORMATION FOR AN ADDRESS INPUT                                                                    |
| 82180757     | Granted | 7487255       | 8/14/2003   | 2/3/2009   | 10/641217          | US | Proxy Networking Device For A Router                                                                                                       |
| 82180760     | Granted | 8045566       | 8/1/2003    | 10/25/2011 | 10/633444          | US | Routing Cache Management With Route Fragmentation                                                                                          |
| 82180763     | Granted | 7447223       | 1/28/2004   | 11/4/2008  | 10/767236          | US | Automated Router Load Balancing                                                                                                            |
| 82184693     | Granted | 7609705       | 5/20/2004   | 10/27/2009 | 10/850334          | US | Switching Mesh With Broadcast Path Redundancy                                                                                              |
|              |         |               |             |            |                    |    | Determination Of A Plurality Of Paths Before Selection Of One Path Of The Plurality Of Paths For Transmission Of One Or More Packets       |
| 82184696     | Granted | 7656790       | 6/28/2004   | 2/2/2010   | 10/878143          | US | Handling Link Failures With Re-tagging                                                                                                     |
| 82186505     | Granted | 8156207       | 10/8/2004   | 41009      | 10/962315          | US | A Method And Apparatus For Remotely Configuring Network Devices                                                                            |
| 82186562     | Granted | 7552238       | 9/30/2004   | 6/23/2009  | 10/955268          | US | Method And Apparatus For Maintaining Network Device Configurations                                                                         |
| 82187624     | Granted | 7359383       | 3/29/2004   | 4/15/2008  | 10/812267          | US | Load Balancing With Mesh Tagging                                                                                                           |
| 82187627     | Granted | 7969863       | 3/29/2004   | 6/28/2011  | 10/812260          | US | Directed Cost Protocol                                                                                                                     |
| 82187630     | Granted | 7706411       | 3/29/2004   | 4/27/2010  | 10/812368          | US | Handling Oversubscribed Mesh Ports With Re-tagging                                                                                         |
| 82189253     | Granted | 7577855       | 5/19/2004   | 8/18/2009  | 10/850167          | US | System For Controlling Current Flow To Electronic Attachment Device                                                                        |
| 82191869     | Granted | 7424626       | 4/28/2004   | 39700      | 10/833603          | US | Laptop Computer Recharging Using Ethernet Connection                                                                                       |
| 82198925     | Granted | 8769135       | 11/4/2004   | 7/1/2014   | 10/981150          | US | Data Set Integrity Assurance With Reduced Traffic                                                                                          |
| 82202861     | Granted | 7504809       | 5/26/2005   | 3/17/2009  | 11/138948          | US | POWER SUPPLY AND A DEVICE FOR PROVIDING A CONTROL VOLTAGE THAT IS SUBSTANTIALLY EQUIVALENT TO A REFERENCE VOLTAGE USED BY THE POWER SUPPLY |
| 82206041     | Granted | 7533109       | 4/26/2005   | 39945      | 11/114253          | US | Item Queue Management                                                                                                                      |
| 82211036     | Granted | 7571326       | 5/25/2005   | 8/4/2009   | 11/138511          | US | Relative Latency Dynamics For Identity Authentication                                                                                      |
| 82217591     | Granted | 9037748       | 5/31/2006   | 5/19/2015  | 11/443154          | US | Method And Apparatus For Determining The Switch Port To Which And End-node Is Connected                                                    |

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| 82217594     | Granted   | 8891524       | 6/30/2006   | 41961      | 11/477853          | US | Method And Apparatus Of Automatically Providing Registration Information                                |
| 82217969     | Granted   | 7742439       | 10/13/2006  | 6/22/2010  | 11/580458          | US | Automated Correction Of Duplex Mismatches                                                               |
| 82227644     | Published |               | 2/28/2007   |            | 11/680089          | US | Transmitting A Packet From A Distributed Trunk Switch                                                   |
| 82230140     | Granted   | 7940700       | 1/31/2007   | 5/10/2011  | 11/669847          | US | METHOD OF DISTRIBUTING MULTIPLE SPANNING TREE PROTOCOL CONFIGURATION                                    |
| 82230329     | Granted   | 7873038       | 4/30/2007   | 1/18/2011  | 11/796971          | US | Packet Processing                                                                                       |
| 82230332     | Granted   | 8045550       | 3/1/2007    | 10/25/2011 | 11/712706          | US | PACKET TUNNELING                                                                                        |
| 82231265     | Granted   | 7849503       | 6/1/2007    | 12/7/2010  | 11/809512          | US | PACKET PROCESSING USING DISTRIBUTION ALGORITHM                                                          |
| 82231268     | Granted   | 8416773       | 7/11/2007   | 4/9/2013   | 11/827293          | US | Packet Monitoring                                                                                       |
| 82241504     | Published |               | 9/15/2008   |            | 12/210380          | US | Computing Platform With System Key                                                                      |
| 82241627     | Granted   | 8108645       | 6/26/2008   | 1/31/2012  | 12/147271          | US | Optimized Memory Allocation Via Feature Extraction                                                      |
| 82244879     | Granted   | 7869374       | 5/5/2008    | 1/11/2011  | 12/151177          | US | System And Method For Detecting A Network Loop                                                          |
| 82247312     | Allowed   |               | 2/9/2010    |            | 12/703170          | US | DISTRIBUTED DENIAL-OF-SERVICE SIGNATURE TRANSMISSION                                                    |
| 82248935     | Granted   | 9008112       | 2/19/2009   | 4/14/2015  | 12/389100          | US | Network Switch                                                                                          |
| 82249121     | Granted   | 9147172       | 1/26/2009   | 9/29/2015  | 12/359547          | US | Source Configuration Based On Connection Profile                                                        |
| 82249934     | Published |               | 10/26/2009  |            | 12/605707          | US | Controlling A Device's Boot Path With Disk Locking                                                      |
| 82258610     | Granted   | 8046578       | 4/14/2005   | 10/25/2011 | 11/105652          | US | System And Method For Providing HTML Authentication Using An Access Controller                          |
| 82259546     | Published |               | 10/30/2009  |            | 12/609624          | US | Authentication Methods And Devices                                                                      |
| 82266350     | Granted   | 5999530       | 12/6/1996   | 12/7/1999  | 08/761574          | US | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN OF MULTICAST PACKETS  |
| 82266356     | Granted   | 6169741       | 8/5/1999    | 1/2/2001   | 09/369495          | US | METHOD AND APPARATUS FOR TRANSPARENT INTERMEDIATE SYSTEM BASED FILTERING ON A LAN MULTICAST PACKETS     |
| 82266416     | Granted   | 5834950       | 3/17/1994   | 11/10/1998 | 08/214376          | US | Phase detector which eliminates frequency ripple                                                        |
| 82266476     | Granted   | 6329906       | 9/29/2000   | 12/11/2001 | 09/675730          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                   |
| 82266479     | Granted   | 6496105       | 10/10/2001  | 12/17/2002 | 09/974237          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                   |
| 82266482     | Granted   | 6710704       | 10/28/2002  | 3/23/2004  | 10/281831          | US | Power Transfer Apparatus For Concurrently Transmitting Data And Power Over Data Wires                   |
| 82266668     | Granted   | 5828665       | 2/28/1997   | 10/27/1998 | 08/807552          | US | Apparatus And Method For Selecting Improved Routing Paths In An Emulated LAN Over An ATM Network        |
| 82266731     | Granted   | 6163541       | 1/15/1998   | 12/19/2000 | 09/007801          | US | Method For Selecting Virtual Channels Based On Address Priority In An Asynchronous Transfer Mode Device |
| 82266854     | Granted   | 5898669       | 3/22/1996   | 4/27/1999  | 08/621055          | US | ATM Traffic Management Device                                                                           |

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| 82267412     | Granted | 6212165       | 3/24/1998   | 4/3/2001   | 09/047066          | US | Apparatus For And Method Of Allocating A Shared Resource Among Multiple Ports                          |
| 82267415     | Granted | 5999948       | 9/3/1997    | 12/7/1999  | 08/922284          | US | Dynamic Configuration Forms In Network Management Software                                             |
| 82267604     | Granted | 6115376       | 10/29/1997  | 9/5/2000   | 08/959833          | US | Medium Access Control Address Authentication                                                           |
| 82267913     | Granted | 6026420       | 1/20/1998   | 2/15/2000  | 09/009393          | US | High-speed evaluation of polynomials                                                                   |
| 82268225     | Granted | 6041058       | 9/11/1997   | 3/21/2000  | 08/928882          | US | Hardware Filtering Method And Apparatus                                                                |
| 82268417     | Granted | 6181404       | 2/27/1998   | 1/30/2001  | 09/031942          | US | APPARATUS AND METHOD FOR MOUNTING A LIQUID CRYSTAL DISPLAY (LCD) ASSEMBLY ONTO A PRINTED CIRCUIT BOARD |
| 82268660     | Granted | 6047172       | 3/10/1998   | 4/4/2000   | 09/037848          | US | A TRANSCIEVER ASSEMBLY WITH AN ELECTROMAGNETIC SHIELD                                                  |
| 82268666     | Granted | 6003689       | 3/18/1998   | 12/21/1999 | 09/044051          | US | PCB Ejector Cage Assembly                                                                              |
| 82268978     | Granted | 6064305       | 7/10/1998   | 5/16/2000  | 09/113782          | US | Network Security                                                                                       |
| 82269284     | Granted | 6442603       | 11/21/2000  | 8/27/2002  | 09/718170          | US | Methods for Ordered Delivery of Electronic Content                                                     |
| 82269479     | Granted | 6167781       | 11/30/1998  | 1/2/2001   | 09/201682          | US | System and Apparatus for Retaining Position of Cam Follower                                            |
| 82269911     | Granted | 6882630       | 8/20/2003   | 4/19/2005  | 10/644173          | US | SPANNING TREE WITH RAPID PROPAGATION OF TOPOLOGY CHANGES                                               |
| 82270160     | Granted | 6281432       | 5/25/1999   | 8/28/2001  | 09/318167          | US | Sheet Metal Component With Depression                                                                  |
| 82270535     | Granted | 6535490       | 4/22/1999   | 3/18/2003  | 09/296996          | US | HIGH AVAILABILITY SPANNING TREE WITH RAPID RECONFIGURATION WITH ALTERNATE PORT SELECTION               |
| 82270538     | Granted | 6697339       | 1/27/2003   | 2/24/2004  | 10/351709          | US | HIGH AVAILABILITY SPANNING TREE WITH RAPID RECONFIGURATION WITH ALTERNATE PORT SELECTION               |
| 82270790     | Granted | 7028335       | 8/27/1999   | 4/11/2006  | 09/384158          | US | METHOD AND SYSTEM FOR CONTROLLING ATTACKS ON DISTRIBUTED NETWORK ADDRESS TRANSLATION ENABLED NETWORKS  |
| 82270910     | Granted | 6603741       | 8/12/1999   | 8/5/2003   | 09/373231          | US | Monitoring Of Connection Between Network Devices In A Packet-based Communication System                |
| 82270970     | Granted | 5644270       | 3/15/1996   | 7/1/1997   | 08/618413          | US | ENCHANGED STABILITY VOLTAGE CONTROLLED RC OSCILLATOR                                                   |
| 82270973     | Granted | 5809072       | 3/15/1996   | 36053      | 08/616750          | US | Mixed Signal Adaptive Equalizer                                                                        |
| 82271036     | Granted | 6601101       | 3/15/2000   | 7/29/2003  | 09/525965          | US | Transparent Access To Network Attached Devices                                                         |
| 82272038     | Granted | 6996621       | 12/6/2000   | 2/7/2006   | 09/731333          | US | METHOD FOR SUPPORTING SECONDARY ADDRESS DELIVERY ON REMOTE ACCESS SERVERS                              |
| 82272101     | Granted | 7450560       | 5/31/2000   | 11/11/2008 | 09/584516          | US | Method For Address Mapping In A Network Access System and A Network Access Device For Use Therewith    |
| 82272287     | Granted | 7120819       | 11/15/2001  | 10/10/2006 | 09/998846          | US | METHOD AND SYSTEM FOR FAULT DIAGNOSIS IN A DATA NETWORK                                                |

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| 82272413     | Granted     | 6353891       | 8/9/2000    | 3/5/2002   | 09/579185          | US | Control Channel Security For Realm Specific Internet Protocol                                                                                        |
| 82272593     | Granted     | 7463732       | 8/9/2000    | 12/9/2008  | 09/634185          | US | FLEXIBLE DATA OUTLET                                                                                                                                 |
| 82272782     | Granted     | 7039049       | 12/22/2000  | 5/2/2006   | 09/748588          | US | METHOD AND APPARATUS FOR PPPoE BRIDGING IN A ROUTING CMIS                                                                                            |
| 82273094     | Granted     | 7073055       | 2/22/2001   | 7/4/2006   | 09/791176          | US | SYSTEM AND METHOD FOR PROVIDING DISTRIBUTED AND DYNAMIC NETWORK SERVICES FOR REMOTE ACCESS SERVERS                                                   |
| 82273406     | Granted     | 7028086       | 8/22/2001   | 4/11/2006  | 09/934984          | US | Apparatus, method, and computer program for detection of server-like devices on a computer network based on ingress to egress network traffic ratios |
| 82273847     | Granted     | 6816018       | 7/19/2002   | 11/9/2004  | 10/198902          | US | System and Method for Partitioning a System Timing Reference Among Multiple Circuit Boards                                                           |
| 82273973     | Granted     | 7324488       | 2/10/2003   | 1/29/2008  | 10/364049          | US | METHOD AND SYSTEM FOR PROVIDING AN INTELLIGENT DATA CONCENTRATOR COMMUNICATIVELY COUPLED TO A NETWORK BY A WIRELESS MODE                             |
| 82274030     | Granted     | 7522614       | 2/28/2003   | 39924      | 10/376930          | US | Multi-Service Access Platform for Telecommunications and Data Networks                                                                               |
| 82274096     | Granted     | 7089424       | 5/10/2002   | 38937      | 10/144273          | US | Peripheral Device For Protecting Data Stored On Host Device And Method And System Using The Same                                                     |
| 82274156     | Application |               | 4/14/2009   |            | 12/423690          | US | Computer System And Network Interface With Hardware Based Packet Filtering And Classification                                                        |
| 82274279     | Granted     | 7996588       | 5/30/2003   | 40764      | 10/449816          | US | Method And Apparatus For Real-time Transport Of Multi-media Information In A Network                                                                 |
| 82274282     | Granted     | 7391784       | 12/30/2002  | 6/24/2008  | 10/334702          | US | Method and System for Communicating State Information Between Devices of a Communications Network                                                    |
| 82274408     | Granted     | 7660323       | 6/28/2004   | 40218      | 10/876654          | US | Cascade Control System for Network Units                                                                                                             |
| 82274411     | Granted     | 7463654       | 12/22/2003  | 39791      | 10/744974          | US | Stackable Routers Employing A Routing Protocol                                                                                                       |
| 82274468     | Granted     | 7483999       | 7/9/2004    | 1/27/2009  | 10/886575          | US | DISTRIBUTED BRIDGING WITH SYNCHRONIZATION FORWARDING DATABASES                                                                                       |
| 82274471     | Granted     | 7555751       | 8/11/2004   | 39994      | 10/916070          | US | Method and System for Performing a Live System Upgrade                                                                                               |
| 82274591     | Granted     | 7957390       | 5/18/2005   | 40701      | 11/133039          | US | Detection Of Signatures In Disordered Message Segments                                                                                               |
| 82274597     | Granted     | 8081630       | 5/3/2005    | 40897      | 11/121192          | US | Packet Diversion In Switching Fabrics And Multiple Forwarding Instructions For Packets                                                               |
| 82275278     | Granted     | 5717690       | 11/17/1995  | 35836      | 08/560314          | US | Coordination and Control of Data Streams that Terminate at Different Termination Units                                                               |
| 82275284     | Granted     | 5878040       | 8/26/1997   | 36221      | 08/918817          | US | Coordination And Control Of data Streams That Terminate At Different Termination Units                                                               |
| 82690033     | Published   |               | 7/29/2011   |            | 13/194037          | US | RESPONSE MESSAGES BASED ON PENDING REQUESTS                                                                                                          |

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| 82828015     | Allowed     |               | 10/27/2011  |            | 13/282678          | US | TEMPERATURE ESTIMATION BASED ON A FAN CONTROL SIGNAL                                                                                 |
| 82829655     | Allowed     |               | 1/24/2012   |            | 13/356742          | US | SECURITY ACTIONS BASED ON CLIENT IDENTITY DATABASES                                                                                  |
| 82854049     | Published   |               | 10/28/2009  |            | 13/260170          | US | METHOD AND APPARATUS FOR VIRUS THROTTLING WITH RATE LIMITING                                                                         |
| 82861414     | Granted     | 8291246       | 10/20/2011  | 41198      | 13/277817          | US | HIGH SPEED NETWORK INTERFACE WITH AUTOMATIC POWER MANAGEMENT WITH AUTO-NEGOTIATION                                                   |
| 82992334     | Published   |               | 5/1/2012    |            | 13/461426          | US | Network Switch with Mutually Coupled Look-Up Engine and Network Processor                                                            |
| 83037535     | Published   |               | 7/30/2012   |            | 13/562224          | US | SEARCHING FOR MULTICAST CONSUMERS IN A NETWORK OF INTERCONNECTED NODES                                                               |
| 83135113     | Granted     | 8654637       | 11/16/2012  | 41688      | 13/679513          | US | Method For Configuration Of A Load Balancing Algorithm In A Network Device                                                           |
| 83135883     | Published   |               | 7/29/2010   |            | 13/809724          | US | A Device And Method For Egress Packet Forwarding Using Mesh Tagging                                                                  |
| 83138814     | Published   |               | 6/13/2013   |            | 13/917350          | US | COUNTER UPDATE REMOTE PROCESSING                                                                                                     |
| 83198084     | Published   |               | 3/14/2013   |            | 13/803060          | US | NETWORK CONTROLLER NORMALIZATION OF NETWORK TRAFFIC                                                                                  |
| 83199169     | Allowed     |               | 3/15/2013   |            | 13/835320          | US | FLOW CONTROL TRANSMISSION                                                                                                            |
| 83207785     | Allowed     |               | 5/16/2013   |            | 13/895553          | US | CERTIFICATE GRANT LIST AT NETWORK DEVICE                                                                                             |
| 83588866     | Published   |               | 4/19/2011   |            | 14/003883          | US | Computing A Performance Characteristic Of A Network Device                                                                           |
| 83991390     | Published   |               | 4/9/2012    |            | 14/372528          | US | ASSOCIATING AN IDENTIFIER FOR A VIRTUAL MACHINE WITH A PUBLISHED NETWORK CONFIGURATION SERVICE TYPE                                  |
|              |             |               |             |            |                    |    |                                                                                                                                      |
| 83991430     | Published   |               | 4/30/2012   |            | 14/372573          | US | CONVERGED FABRIC FOR FCoe                                                                                                            |
| 84084099     | Published   |               | 4/26/2012   |            | 14/395618          | US | MULTICAST ROUTER TOPOLOGY DISCOVERY                                                                                                  |
| 84089386     | Published   |               | 5/15/2012   |            | 14/397422          | US | OPTICAL COMMUNICATION TECHNIQUES                                                                                                     |
| 84123246     | Published   |               | 1/13/2015   |            | 14/595289          | US | Transmitting A Packet From A Distributed Trunk Switch                                                                                |
| 84297051     | Application |               | 7/10/2015   |            | 14/796415          | US | Discovering Non Managed Devices In a Network Such as a LAN Using HTTP                                                                |
| 90056912     | Application |               | 3/15/2013   |            | 14/777465          | US | SECURE PATH DETERMINATION BETWEEN DEVICES                                                                                            |
| 81989222     | Granted     | 7149529       | 5/7/2001    | 39063      | 09/850503          | US | Method And System For Controlling Selective Wireless Communication Access                                                            |
| 82251248     | Granted     | 7616966       | 10/27/2005  | 40127      | 11/259864          | US | Determining Optimal Access Point Locations For Access Points That Perform Automatic Channel Selection And Automatic Power Adjustment |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------|
| 82267730     | Granted   | 6058291       | 12/3/1997   | 36648      | 08/984566          | US | METHODS AND APPARATUS FOR CARRIER SUPPRESSION IN A RADIO MODULATOR                                            |
| 82272908     | Granted   | 6509876       | 9/8/2000    | 37642      | 09/657500          | US | Antenna For Wireless Communication System                                                                     |
| 82272971     | Granted   | 6965942       | 1/12/2001   | 38671      | 09/759389          | US | METHOD AND SYSTEM FOR IMPROVING THROUGHPUT IN A WIRELESS LOCAL AREA NETWORKS WITH A DYNAMIC CONTENTION WINDOW |
| 82272974     | Granted   | 6990116       | 1/12/2001   | 1/24/2006  | 09/759770          | US | METHOD AND SYSTEM FOR IMPROVING THROUGHPUT IN A WIRELESS LOCAL AREA NETWORKS WITH MODE SWITCHING              |
| 82274033     | Granted   | 7733904       | 7/1/2002    | 6/8/2010   | 10/186810          | US | System And Method For Roaming Between Wireless Networks                                                       |
| 82274099     | Granted   | 7702726       | 4/10/2002   | 4/20/2010  | 10/120152          | US | System And Methods For Providing Presence Services In IP Network                                              |
| 82274348     | Granted   | 7660990       | 4/27/2004   | 40218      | 10/832698          | US | METHOD FOR ESTABLISHING A SECURE AD HOC WIRELESS LAN                                                          |
| 82749017     | Granted   | 8655278       | 6/20/2011   | 2/18/2014  | 13/164357          | US | Band Steering                                                                                                 |
| 82964757     | Published |               | 4/23/2012   |            | 13/453688          | US | WIRELESS CLIENT AUTHENTICATION AND ASSIGNMENT                                                                 |
| 83049211     | Published |               | 11/30/2012  |            | 13/690975          | US | CONFIGURATION INFORMATION SELECTION BASED ON EXTRACTED INFORMATION                                            |
| 83095202     | Published |               | 1/17/2013   |            | 13/744026          | US | ACCESS POINT                                                                                                  |
| 82233326     | Granted   | 8099573       | 10/22/2008  | 1/17/2012  | 12/256329          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                       |
| 82249499     | Granted   | 9141621       | 4/30/2009   | 9/22/2015  | 12/432807          | US | COPYING A DIFFERENTIAL DATA STORE INTO TEMPORARY STORAGE MEDIA IN RESPONSE TO A REQUEST                       |
| 82261358     | Granted   | 8782368       | 5/11/2010   | 7/15/2014  | 12/777478          | US | Storing Chunks In Containers                                                                                  |
| 82261361     | Published |               | 8/4/2010    |            | 12/850142          | US | Performing Deduplication Of Input Data At Plural Levels                                                       |
| 82837126     | Granted   | 9009429       | 3/30/2009   | 4/14/2015  | 13/260304          | US | Deduplication Of Data Stored In A Copy Volume                                                                 |
| 83701120     | Published |               | 10/18/2011  |            | 14/234146          | US | INDEX FOR DEDUPLICATION                                                                                       |
| 81968366     | Granted   | 6898045       | 11/26/2003  | 5/24/2005  | 10/723757          | US | MEDIA WITH PRE-RECORDED ALIGNMENT TRANSITIONS                                                                 |
| 81978665     | Granted   | 6469525       | 1/4/2001    | 10/22/2002 | 09/754984          | US | METHOD FOR SENSING HUMIDITY IN A TAPE LIBRARY                                                                 |
| 81978794     | Granted   | 7048345       | 10/3/2003   | 5/23/2006  | 10/678866          | US | Reconfigurable Data Cartridge Import/export Drawer                                                            |
| 82006889     | Granted   | 6909570       | 11/25/2002  | 6/21/2005  | 10/303415          | US | Hard Disk Drive Storage System                                                                                |
| 82025927     | Granted   | 5818668       | 7/24/1997   | 10/6/1998  | 08/900211          | US | Compact Tape Drive Head Positioning System                                                                    |
| 82030046     | Granted   | 6999274       | 9/27/2002   | 2/14/2006  | 10/256572          | US | SERVO HEAD FOR MAGNETIC TAPE                                                                                  |
| 82030049     | Granted   | 7206167       | 10/30/2003  | 4/17/2007  | 10/696824          | US | SERVO WRITE METHOD FOR MAGNETIC TAPE                                                                          |
| 82032608     | Granted   | 6194697       | 4/13/1999   | 2/27/2001  | 09/290807          | US | Calibration System For An Imaging Apparatus And Method                                                        |
| 82033172     | Granted   | 6161155       | 7/20/1998   | 12/12/2000 | 09/119170          | US | Apparatus And Method For Storing Retrievable Boundary Information Into A Buffer Memory Of A Receiving Device  |
| 82034669     | Granted   | 6078483       | 5/14/1998   | 6/20/2000  | 09/079109          | US | Flexible Circuit Support Structure And Head Carrier                                                           |

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| 82036232     | Granted   | 5927633       | 7/22/1998   | 7/27/1999  | 09/121273          | US | Resiliently Biased Parking Seat For Receiving The Leader Port Of A Single Reel Tape Cartridge                      |
| 82049777     | Granted   | 6116063       | 4/20/1999   | 9/12/2000  | 09/294965          | US | Adjustable Bezel Assembly                                                                                          |
| 82064384     | Granted   | 6920003       | 8/2/2002    | 7/19/2005  | 10/209856          | US | Data Storage Reading Device And Method                                                                             |
| 82064390     | Granted   | 7126771       | 7/5/2002    | 10/24/2006 | 10/189174          | US | DATA READ CHANNEL AND METHOD OF CONTROLLING THE SAME                                                               |
| 82064762     | Granted   | 6954834       | 7/8/2002    | 10/11/2005 | 10/189772          | US | DATA BACKUP INCLUDING TAPE AND NON-VOLATILE MEMORY UNITS AND METHOD OF OPERATING SAME                              |
| 82065575     | Granted   | 7472245       | 12/30/2005  | 12/30/2008 | 11/323545          | US | System And Method For Securing Drive Access To Data Storage Media Based On Medium Identifiers                      |
| 82067699     | Granted   | 6674599       | 3/10/1999   | 1/6/2004   | 09/265356          | US | Tape Data Storage Cartridge With Memory                                                                            |
| 82067756     | Granted   | 6539514       | 5/12/1999   | 3/25/2003  | 09/310407          | US | READ WHILE WRITE METHOD IN DATA STORAGE DEVICE                                                                     |
| 82068071     | Granted   | 6785786       | 8/28/1998   | 8/31/2004  | 09/486439          | US | Data Backup And Recovery Systems                                                                                   |
| 82069817     | Granted   | 6978414       | 7/17/2001   | 12/20/2005 | 09/905915          | US | Method And Apparatus For Protecting Against Errors Occurring In Data Storage Device Buffers                        |
| 82094477     | Granted   | 7196866       | 12/17/2003  | 3/27/2007  | 10/737938          | US | Interconnect Structure Having Multiple Layers Of Traces For Electrical Connection To A Tape Head Assembly          |
| 82094663     | Granted   | 6906654       | 6/30/2003   | 6/14/2005  | 10/609128          | US | Data Recovery                                                                                                      |
| 82097477     | Granted   | 7349997       | 1/15/2003   | 3/25/2008  | 10/346002          | US | Dynamic Command Filter                                                                                             |
| 82176827     | Granted   | 7230792       | 11/19/2003  | 6/12/2007  | 10/717794          | US | MEDIA SELECTION SYSTEMS AND METHODS HAVING A COUPLER FOR SLIDABLY ENGAGING A STORAGE MEDIUM IN A STORAGE SYSTEM    |
| 82184441     | Granted   | 7624196       | 11/5/2004   | 11/24/2009 | 10/982086          | US | SYSTEMS AND APPARATUS FOR MANAGING A STORAGE DEVICE ADDRESS                                                        |
| 82189937     | Granted   | 7301724       | 9/8/2004    | 11/27/2007 | 10/936340          | US | TRANSDUCING HEAD                                                                                                   |
| 82194803     | Granted   | D523859       | 4/4/2005    | 38895      | 29/226938          | US | Media Cartridge                                                                                                    |
| 82211225     | Granted   | 8839125       | 10/26/2005  | 9/16/2014  | 11/259217          | US | Alternate Power Up Inventory Methods For Storage Apparatus                                                         |
| 82211411     | Granted   | 7588492       | 8/1/2005    | 9/15/2009  | 11/195071          | US | Air Plenum                                                                                                         |
| 82211414     | Granted   | 8015373       | 5/13/2005   | 9/6/2011   | 11/129588          | US | Information Sharing Between A Backup Storage Device And A Management Appliance                                     |
| 82217528     | Granted   | 7818587       | 7/25/2006   | 10/19/2010 | 11/493910          | US | DATA TRANSFER SYSTEM ENCRYPTING DATA WITH INFORMATION UNIQUE TO A REMOVABLE DATA STORAGE ITEM                      |
| 82222838     | Granted   | 7656614       | 9/27/2006   | 2/2/2010   | 11/528215          | US | Tape Drive                                                                                                         |
| 82225646     | Granted   | 8035911       | 2/15/2007   | 10/11/2011 | 11/707722          | US | CARTRIDGE DRIVE DIAGNOSTIC TOOLS                                                                                   |
| 82228142     | Granted   | 8045289       | 1/31/2008   | 10/25/2011 | 12/023153          | US | Data Transfer Apparatus For Use With Tape Cartridges And Tape Cartridges For Use With Such Data Transfer Apparatus |
| 82235696     | Published |               | 10/1/2008   |            | 12/243914          | US | Key Management In Storage Libraries                                                                                |
| 82240880     | Granted   | 7835103       | 9/30/2008   | 40498      | 12/242180          | US | Tape Drive With Variable Wrap Reversal Location                                                                    |

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| 82241633     | Granted     | 7733594       | 9/30/2008   | 40337      | 12/242382          | US | Storage Device With Pulsed Motor Torque                                                                                                |
| 82244441     | Granted     | 7911727       | 10/1/2008   | 3/22/2011  | 12/243041          | US | Controlling Motion Of Storage Media                                                                                                    |
| 82263107     | Granted     | 8248279       | 10/26/2010  | 8/21/2012  | 12/911892          | US | HISTORY BUFFER APPARATUS AND METHOD FOR ADAPTING                                                                                       |
| 82276529     | Granted     | 7623309       | 4/28/2004   | 11/24/2009 | 10/833271          | US | LOSSLESS DATA COMPRESSION                                                                                                              |
| 82961946     | Granted     | 8437234       | 4/25/2012   | 5/7/2013   | 13/456049          | US | Apparatus And Method For Use In Transferring Information Relative To A Storage Medium                                                  |
| 83095889     | Granted     | 8730615       | 10/25/2012  | 5/20/2014  | 13/660738          | US | DYNAMIC PHASE DETECTOR SWITCHING                                                                                                       |
| 83748571     | Granted     | 8543643       | 3/7/2011    | 41541      | 13/042209          | US | BIDIRECTIONAL READ/WRITE HEADS HAVING BACKWARD READING COMPATIBILITY                                                                   |
| 84072961     | Published   |               | 6/8/2012    |            | 14/394251          | US | System And Method For Inquiry Caching                                                                                                  |
| 84224883     | Application |               | 3/22/2013   |            | 14/763953          | US | REPLACING A CHUNK OF DATA WITH A REFERENCE TO A LOCATION                                                                               |
| 82238009     | Granted     | 7437386       | 9/20/2002   | 10/14/2008 | 10/251895          | US | REDUCED CONTACT READ/WRITE HEAD                                                                                                        |
| 82250432     | Granted     | 8650571       | 3/30/2009   | 2/11/2014  | 12/413969          | US | System And Method For A Multi-node Environment With Shared Storage                                                                     |
| 82261547     | Granted     | 8977659       | 8/21/2007   | 3/10/2015  | 11/842919          | US | Scheduling Data Analysis Operations In A Computer System                                                                               |
| 82261550     | Granted     | 7836017       | 7/2/2007    | 11/16/2010 | 11/772800          | US | Distributing Files Across Multiple Permissibly Heterogeneous Storage Devices                                                           |
| 82604254     | Granted     | 8725730       | 5/23/2011   | 41772      | 13/113507          | US | File Replication In A Distributed Segmented File System                                                                                |
| 82963592     | Published   |               | 4/30/2012   |            | 13/460802          | US | Responding to a Query in a Data Processing System                                                                                      |
| 82177202     | Allowed     |               | 10/31/2005  |            | 11/264618          | US | MAINTAINING FAULT DOMAINS IN A DISTRIBUTED DATABASE                                                                                    |
| 82898434     | Published   |               | 4/23/2012   |            | 13/453285          | US | Method And Apparatus For Re-provisioning A Server Of A Data Center                                                                     |
| 82077500     | Granted     | 6178409       | 6/17/1996   | 36914      | 08/672346          | US | VIRTUAL MACHINE CONSTRUCTION                                                                                                           |
| 82194809     | Granted     | 8051299       | 3/20/2006   | 40848      | 11/378304          | US | System, Method And Article Of Manufacture For Multiple-Entry Point Virtual Point Of Sale Architecture                                  |
| 82199300     | Granted     | 8577044       | 10/28/2005  | 11/5/2013  | 11/262131          | US | A Computer Security Method And Computer System                                                                                         |
| 82254551     | Granted     | 7472421       | 9/30/2002   | 12/30/2008 | 10/259918          | US | METHOD AND APPARATUS FOR AUTOMATIC AND SECURE DISTRIBUTION OF AN ASYMMETRIC KEY SECURITY CREDENTIAL IN A UTILITY COMPUTING ENVIRONMENT |
| 82585296     | Published   |               | 10/12/2009  |            | 13/054837          | US | Computer Model Of Security Risks                                                                                                       |
| 83731897     | Allowed     |               | 5/27/2011   |            | 14/122619          | US | SYSTEMS AND PROCESSES FOR SECURING SENSITIVE INFORMATION                                                                               |
| 81966305     | Granted     | 7353181       | 8/15/2001   | 4/1/2008   | 09/930640          | US | TRANSACTION GATEWAY                                                                                                                    |
| 82133063     | Granted     | 6601190       | 10/28/1999  | 7/29/2003  | 09/429681          | US | Allocating Freight Haulage Jobs                                                                                                        |
| 82852981     | Published   |               | 4/13/2009   |            | 13/259081          | US | AUTOMATIC CAPTURE AND REPORTING OF COMPUTER CONFIGURATION DATA                                                                         |
|              |             |               |             |            |                    |    | Back Drill Verification Feature                                                                                                        |

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| 82891315     | Published   |               | 7/29/2009   |            | 13/322973          | US | INTERFACING CLIMATE CONTROLLERS AND COOLING DEVICES                                                                                       |
| 81982979     | Granted     | 7120832       | 9/27/2001   | 39000      | 09/966953          | US | Storage Device Performance Monitor                                                                                                        |
| 81983537     | Granted     | 7136882       | 7/31/2001   | 11/14/2006 | 09/919090          | US | Storage Device Manager                                                                                                                    |
| 82091609     | Granted     | 7610295       | 10/1/2002   | 40113      | 10/260411          | US | Method And Apparatus For Generating Persistent Path Identifiers                                                                           |
| 82170956     | Granted     | 7177992       | 10/31/2003  | 39126      | 10/697948          | US | System For Coupling Data Stored In Buffer Memories To Backup Storage Devices                                                              |
| 82215911     | Granted     | 8543782       | 4/25/2006   | 41541      | 11/411467          | US | Content-based, Compression-enhancing Routing In Distributed, Differential Electronic-data Storage Systems                                 |
| 82259300     | Granted     | 8812453       | 1/28/2010   | 8/19/2014  | 12/695750          | US | Database Archiving Using Clusters                                                                                                         |
| 82275842     | Granted     | 8885653       | 11/23/2010  | 11/11/2014 | 12/952267          | US | PROTOCOL TRANSLATION                                                                                                                      |
| 82671994     | Granted     | 9116967       | 8/15/2011   | 8/25/2015  | 13/210140          | US | METHODS AND APPARATUS TO INTERFACE AN APPLICATION TO A DATABASE                                                                           |
| 82906695     | Published   |               | 3/30/2012   |            | 13/436692          | US | Database backup without particularly specifying server                                                                                    |
| 82924236     | Granted     | 8898367       | 3/17/2010   | 11/25/2014 | 13/383960          | US | UNIFIED INFORMATION BUS                                                                                                                   |
| 83700290     | Published   |               | 7/26/2011   |            | 14/110406          | US | Job Plan Verification                                                                                                                     |
| 83853706     | Application |               | 11/21/2011  |            | 14/359473          | US | MANAGEMENT OF CONTEXT-SENSITIVE HELP LINKS                                                                                                |
| 84273871     | Application |               | 1/29/2013   |            | 14/764256          | US | RESTORATION OF A FILE SYSTEM OBJECT FROM RAW IMAGE BACKUP DATA                                                                            |
| 81985163     | Granted     | 6804680       | 2/9/2001    | 10/12/2004 | 09/780227          | US | Extensible Database                                                                                                                       |
| 82070009     | Granted     | 7194461       | 3/1/2002    | 39161      | 10/469586          | US | DOCUMENT AND INFORMATION RETRIEVAL METHOD AND APPARATUS                                                                                   |
| 82110839     | Granted     | 6298338       | 3/26/1999   | 10/2/2001  | 09/277052          | US | SYSTEM AND METHOD FOR COMPUTING AN OFFSET SEQUENCE FUNCTION IN A DATABASE SYSTEM                                                          |
| 82239380     | Published   |               | 9/5/2008    |            | 12/205445          | US | Intelligent Data Storage System                                                                                                           |
| 82239386     | Granted     | 7945558       | 1/9/2008    | 5/17/2011  | 12/008357          | US | Query Optimizer With Join Cardinality Estimation Which Mitigates The Effects Of Skew                                                      |
| 82244753     | Granted     | 8190598       | 10/30/2008  | 5/29/2012  | 12/261058          | US | SKREW-BASED COSTING FOR DATABASE QUERIES                                                                                                  |
| 82250933     | Published   |               | 10/1/2009   |            | 12/571691          | US | Multi-dimensional Access To Data                                                                                                          |
| 82258802     | Granted     | 8200660       | 10/22/2009  | 6/12/2012  | 12/603939          | US | SYSTEM AND METHOD FOR EXECUTING QUERIES                                                                                                   |
| 82262729     | Granted     | 8438153       | 10/11/2010  | 5/7/2013   | 12/901934          | US | PERFORMING DATABASE JOINS                                                                                                                 |
| 82275719     | Published   |               | 11/19/2010  |            | 12/950397          | US | SYSTEMS AND METHODS FOR MANAGING A DATABASE                                                                                               |
| 82275722     | Granted     | 8799271       | 1/25/2011   | 8/5/2014   | 13/012868          | US | RANGE PREDICATE CANONIZATION FOR TRANSLATING A QUERY                                                                                      |
| 82911773     | Published   |               | 1/23/2012   |            | 13/356056          | US | Data Skew Insensitive Parallel Join Scheme                                                                                                |
| 81967928     | Granted     | 6801919       | 7/27/2001   | 10/5/2004  | 09/916539          | US | Object Oriented Database Interface Encapsulation That Allows For Chronologically Overlapping Transactions In A Multi-Threaded Environment |
| 82173389     | Granted     | 7924732       | 4/19/2005   | 40645      | 11/109285          | US | Quality Of Service In IT Infrastructures                                                                                                  |

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| 82176512     | Granted     | 7284155       | 3/29/2004   | 39371      | 10/810663          | US | REMOTE SOFTWARE SUPPORT AGENT SYSTEM WITH ELECTRONIC DOCUMENTS FOR TROUBLESHOOTING                            |
| 82236260     | Granted     | 8560359       | 10/31/2008  | 41562      | 12/262240          | US | System And Methods For Modeling Consequences Of Events                                                        |
| 82244189     | Granted     | 7840665       | 11/30/2006  | 40505      | 11/607280          | US | Systems And Methods For Providing Automated Network Management                                                |
| 82260107     | Published   |               | 3/18/2010   |            | 12/726596          | US | GRAPH TRANSFORMATION                                                                                          |
| 82260173     | Granted     | 8219591       | 5/3/2010    | 7/10/2012  | 12/772479          | US | GRAPH QUERY ADAPTATION                                                                                        |
| 82263731     | Published   |               | 3/7/2011    |            | 13/042166          | US | INFORMATION TECHNOLOGY INFRASTRUCTURE RISK MODELING                                                           |
| 82598867     | Granted     | 8429117       | 2/14/2011   | 4/23/2013  | 13/026315          | US | Model Driven Data Loader Framework For An Enterprise Class Data Warehouse                                     |
| 82809638     | Published   |               | 7/27/2011   |            | 13/192382          | US | OBTAINING AND DISPLAYING NETWORK TOPOLOGY INFORMATION                                                         |
| 83217752     | Published   |               | 10/27/2010  |            | 13/879443          | US | SYSTEMS AND METHODS FOR SCHEDULING CHANGES                                                                    |
| 84041414     | Published   |               | 3/26/2012   |            | 14/386633          | US | TOPOLOGICAL QUERY IN MULTI-TENANCY ENVIRONMENT                                                                |
| 84169692     | Application |               | 4/16/2015   |            | 14/688566          | US | Business Service Discovery                                                                                    |
| 81968927     | Granted     | 6651191       | 9/12/2000   | 11/18/2003 | 09/659367          | US | Testing Of Policy Prior To Deployment In A Policy-Based Network Management System                             |
| 81978731     | Granted     | 7367017       | 1/31/2001   | 4/29/2008  | 09/773118          | US | Method And Apparatus For Analyzing Machine Control Sequences                                                  |
| 81982973     | Granted     | 6898634       | 3/6/2001    | 5/24/2005  | 09/799658          | US | Apparatus And Method For Configuring Storage Capacity On A Network For Common Use                             |
| 81983474     | Granted     | 6735595       | 11/29/2000  | 5/11/2004  | 09/725373          | US | DATA STRUCTURE AND STORAGE AND RETRIEVAL METHOD SUPPORTING ORDINALITY BASED SEARCHING AND DATA RETRIEVAL      |
| 81993776     | Granted     | D470859       | 7/31/2001   | 2/25/2003  | 29/145971          | US | Portion Of A Computer Display With A Computer ICON Graphic (As Amended)                                       |
| 82083740     | Granted     | 7398307       | 4/30/2003   | 7/8/2008   | 10/425727          | US | Method And System For Managing A Network                                                                      |
| 82094606     | Granted     | 7281041       | 10/31/2002  | 10/9/2007  | 10/284247          | US | Method And Apparatus For Providing A Baselineing And Auto-thresholding Framework                              |
| 82101599     | Granted     | 8134923       | 9/15/2004   | 3/13/2012  | 10/941536          | US | Discovery Of Virtual Private Networks                                                                         |
| 82165778     | Granted     | 6182157       | 9/19/1996   | 1/30/2001  | 08/710563          | US | Flexible SNMP Trap Mechanism                                                                                  |
| 82174451     | Granted     | 7493622       | 8/12/2003   | 39861      | 10/640619          | US | USE OF THREAD-LOCAL STORAGE TO PROPAGATE APPLICATION CONTEXT IN JAVA 2 ENTERPRISE EDITION (J2EE) APPLICATIONS |
| 82177385     | Granted     | 7617315       | 8/30/2005   | 11/10/2009 | 11/213726          | US | Multi-layered Measurement Model For Data Collection And Method For Data Collection Using Same                 |
| 82177388     | Granted     | 7899906       | 9/29/2009   | 3/1/2011   | 12/569638          | US | Multi-layered Measurement Model For Data Collection And Method For Data Collection Using Same                 |

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| 82188128     | Granted     | 7792055       | 3/19/2007   | 40428      | 11/688015          | US | METHOD AND SYSTEM FOR DETERMINING THE TOPOLOGY OF A NETWORK                                                                                |
| 82214474     | Granted     | 7974211       | 1/10/2007   | 7/5/2011   | 11/651600          | US | Methods And Apparatus For Network Configuration Baselineing And Restoration                                                                |
| 82219838     | Granted     | 7957364       | 1/24/2006   | 6/7/2011   | 11/338528          | US | Determining Network Paths                                                                                                                  |
| 82223150     | Granted     | 8676972       | 3/6/2003    | 41716      | 10/506815          | US | Method And System For A Network Management Console                                                                                         |
| 82238507     | Granted     | 8359582       | 9/27/2008   | 1/22/2013  | 12/239745          | US | Compiling And Inserting Code Snippets At Runtime                                                                                           |
| 82257740     | Published   |               | 8/14/2008   |            | 12/191816          | US | DATA VISUALIZATION USING COMPUTER-ANIMATED FIGURES                                                                                         |
| 82257989     | Granted     | 8676965       | 7/30/2009   | 3/18/2014  | 12/512394          | US | Tracking High-level Network Transactions                                                                                                   |
| 82259672     | Granted     | 8144624       | 10/22/2009  | 3/27/2012  | 12/588655          | US | Method And System For Discovering A Pure Hub-and-spoke Topology                                                                            |
| 82262111     | Published   |               | 6/8/2010    |            | 12/796168          | US | PROCESSING AN ASYNCHRONOUS MESSAGE EVENT                                                                                                   |
| 82262981     | Granted     | 8724466       | 6/30/2010   | 5/13/2014  | 12/827593          | US | PACKET FILTERING                                                                                                                           |
| 82263110     | Granted     | 8312128       | 7/30/2010   | 11/13/2012 | 12/847812          | US | IDENTIFICATION OF MANAGEMENT INFORMATION BASE OBJECT IDENTIFIERS SUPPORTED BY A MANAGED DEVICE                                             |
| 82264355     | Published   |               | 10/28/2010  |            | 12/914659          | US | METHODS AND SYSTEMS TO MAINTAIN DATA COHERENCY                                                                                             |
| 82264421     | Granted     | 9015728       | 10/12/2010  | 42115      | 12/902990          | US | METHODS, APPARATUS, AND SYSTEMS TO ACCESS RUNTIME VALUES OF OBJECT INSTANCES                                                               |
| 82581280     | Granted     | 9077627       | 3/28/2011   | 42192      | 13/073715          | US | REDUCING IMPACT OF RESOURCE DOWNTIME                                                                                                       |
| 82662336     | Granted     | 9123003       | 6/15/2011   | 9/1/2015   | 13/161381          | US | TOPOLOGIES CORRESPONDING TO MODELS FOR HIERARCHY OF NODES                                                                                  |
| 82755131     | Granted     | 8924667       | 10/3/2011   | 12/30/2014 | 13/251661          | US | BACKUP STORAGE MANAGEMENT                                                                                                                  |
| 82871690     | Granted     | 8811210       | 2/13/2012   | 8/19/2014  | 13/372175          | US | EFFECTIVE APPLICATION DENSITIES FOR FABRICS                                                                                                |
| 83037555     | Granted     | 8930964       | 7/31/2012   | 42010      | 13/562942          | US | AUTOMATIC EVENT CORRELATION IN COMPUTING ENVIRONMENTS                                                                                      |
| 83141960     | Granted     | 9009729       | 6/30/2010   | 4/14/2015  | 13/703187          | US | Tracking A Server Request                                                                                                                  |
| 83143732     | Published   |               | 2/7/2013    |            | 13/762203          | US | Identifying A Label-Switched Path (LSP) Associated With A Multi Protocol Label Switching (MPLS) Service And Diagnosing A LSP Related Fault |
| 83681558     | Published   |               | 3/30/2011   |            | 14/005486          | US | TIME FRAME BASED DATA ANALYSIS                                                                                                             |
| 84273831     | Application |               | 12/4/2012   |            | 14/649183          | US | Determining Suspected Root Causes of Anomalous Network Behavior                                                                            |
| 82245686     | Granted     | 8347287       | 10/3/2008   | 41275      | 12/245404          | US | SYSTEM AND METHOD FOR LOCALIZING A SERVER APPLICATION USING A CLIENT-SIDE TRANSLATOR                                                       |
| 82246688     | Granted     | 8572568       | 10/14/2008  | 41576      | 12/251306          | US | Test Tool For Concurrent Web Services And User Interface Testing                                                                           |
| 82249187     | Granted     | 8615739       | 4/23/2009   | 41632      | 12/428733          | US | Resource Monitoring                                                                                                                        |
| 82251494     | Published   |               | 8/25/2009   |            | 12/546735          | US | Dynamic Resource-based Web Service Evaluation                                                                                              |
| 82260611     | Granted     | 8549478       | 12/2/2009   | 10/1/2013  | 12/629107          | US | Graphical User Interface Input Element Identification                                                                                      |

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| 82264352     | Published   |               | 10/22/2010  |            | 12/910025          | US | RELATION-BASED IDENTIFICATION OF AUTOMATION OBJECTS                                                  |
| 82581595     | Granted     | 8677324       | 1/31/2011   | 41716      | 13/017522          | US | EVALUATING PERFORMANCE OF AN APPLICATION USING EVENT-DRIVEN TRANSACTIONS                             |
| 82653969     | Granted     | 9015337       | 7/13/2011   | 42115      | 13/182089          | US | SYSTEMS, METHODS, AND APPARATUS FOR STREAM CLIENT EMULATORS                                          |
| 82963429     | Published   |               | 4/13/2012   |            | 13/446512          | US | PERFORMANCE SIMULATION OF SERVICES                                                                   |
| 82963675     | Published   |               | 6/13/2012   |            | 13/495792          | US | UPDATING VIRTUALIZED SERVICES                                                                        |
| 82963818     | Published   |               | 4/19/2012   |            | 13/450788          | US | TESTING SYSTEM FOR AN INTEGRATED SOFTWARE SYSTEM                                                     |
| 82965464     | Granted     | 9002847       | 2/29/2012   | 42070      | 13/408203          | US | IDENTIFYING AN AUTO-COMPLETE COMMUNICATION PATTERN                                                   |
| 83108515     | Granted     | 9104812       | 4/10/2010   | 42227      | 13/637848          | US | INJECTION OF DATA INTO A SOFTWARE APPLICATION                                                        |
| 83116782     | Published   |               | 11/28/2012  |            | 13/687942          | US | Managing Compliance Across Information Technology Components                                         |
| 83681495     | Published   |               | 5/6/2011    |            | 14/009580          | US | IMAGE-BASED AUTOMATION SYSTEMS AND METHODS                                                           |
| 83992718     | Application |               | 1/30/2013   |            | 14/759726          | US | ACQUIRING IDENTIFICATION OF AN APPLICATION LIFE-cycle MANAGEMENT ENTITY ASSOCIATED WITH SIMILAR CODE |
| 83995675     | Published   |               | 4/30/2012   |            | 14/375005          | US | PRIORITIZATION OF CONTINUOUS DEPLOYMENT PIPELINE TESTS                                               |
| 84030806     | Application |               | 9/5/2014    |            | 14/478420          | US | FRAMEWORKS TO DEMONSTRATE LIVE PRODUCTS                                                              |
| 84046830     | Published   |               | 3/30/2012   |            | 14/387627          | US | SOFTWARE DEVELOPMENT ACTIVITY                                                                        |
| 84125971     | Published   |               | 7/27/2012   |            | 14/416110          | US | RECORDING EXTERNAL PROCESSES                                                                         |
| 84170379     | Application |               | 4/16/2015   |            | 14/688646          | US | QUALITY PREDICTION                                                                                   |
| 81982916     | Granted     | 6880005       | 3/31/2000   | 38454      | 09/539927          | US | Managing Policy Rules In A Network                                                                   |
| 81991220     | Granted     | 7272849       | 4/20/2001   | 9/18/2007  | 09/838807          | US | System And Method For Sharing Data                                                                   |
| 82180139     | Granted     | 7924709       | 5/12/2004   | 4/12/2011  | 10/843593          | US | Access Control Of Resources Using Tokens                                                             |
| 82244375     | Granted     | 8266700       | 5/16/2005   | 9/11/2012  | 10/908520          | US | SECURE WEB APPLICATION DEVELOPMENT ENVIRONMENT                                                       |
| 82244378     | Granted     | 8800042       | 8/21/2006   | 8/5/2014   | 11/465916          | US | Secure Web Application Development And Execution Environment                                         |
| 82581154     | Granted     | 7207065       | 12/10/2004  | 4/17/2007  | 11/010146          | US | APPARATUS AND METHOD FOR DEVELOPING SECURE SOFTWARE                                                  |
| 82581177     | Granted     | 8347392       | 8/25/2006   | 1/1/2013   | 11/510135          | US | Apparatus and method for analyzing and supplementing a program to provide security                   |
| 83138568     | Published   |               | 7/9/2010    |            | 13/704026          | US | RESPONSES TO SERVER CHALLENGES INCLUDED IN A HYPERTEXT TRANSFER PROTOCOL HEADER                      |
| 84000275     | Published   |               | 2/29/2012   |            | 14/381437          | US | NETWORK SERVICE INTERFACE ANALYSIS                                                                   |

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| 81967427     | Granted     | 7209248       | 12/8/2000   | 39196      | 09/733027          | US | Managing The Lifetime Of Distributed Resource Data Using Temporal Scopes                       |
| 82083737     | Granted     | 7577964       | 2/28/2003   | 40043      | 10/376570          | US | SYSTEM AND METHODS FOR DEFINING A BINDING FOR SERVICES                                         |
| 82083743     | Granted     | 7444675       | 2/28/2003   | 10/28/2008 | 10/376693          | US | Systems And Methods For Defining Security Information For Web-services                         |
| 82201739     | Granted     | 7802084       | 11/24/2004  | 40442      | 10/578091          | US | System And Method For Management And Installation Of Operating System Images For Computers     |
| 82243625     | Granted     | 7131123       | 4/30/2001   | 39021      | 09/843757          | US | Automated Provisioning Of Computing Networks Using A Network Database Model                    |
| 82244252     | Granted     | 7539769       | 4/30/2001   | 39959      | 09/843815          | US | Automated Deployment And Management Of Network Devices                                         |
| 82244255     | Granted     | 8141144       | 5/10/2001   | 40988      | 09/852244          | US | Security Policy Management For Network Devices                                                 |
| 82247249     | Granted     | 8838777       | 10/23/2008  | 41898      | 12/256486          | US | Web Service Management                                                                         |
| 82250183     | Published   |               | 7/30/2009   |            | 12/512254          | US | Providing A Policy Topology Model That Interconnects Policies At Different Layers              |
| 82250618     | Published   |               | 3/23/2010   |            | 12/729251          | US | Policy-provisioning                                                                            |
| 82258736     | Granted     | 8352875       | 11/17/2009  | 41282      | 12/620520          | US | System And Method For Integrating A Plurality Of Software Applications                         |
| 82262423     | Published   |               | 6/14/2010   |            | 12/815207          | US | CREATING A CAPACITY PLANNING SCENARIO                                                          |
| 82890405     | Published   |               | 5/29/2009   |            | 13/319770          | US | System And Method For Allocating Resources Of A Server To A Virtual Machine                    |
| 82914730     | Published   |               | 4/17/2012   |            | 13/448741          | US | CONFIGURING AN ENFORCEMENT DEVICE ACCORDING TO A CONTRACT                                      |
| 83139753     | Published   |               | 6/21/2010   |            | 13/702632          | US | SYSTEM FOR TESTING AND CERTIFYING A VIRTUAL APPLIANCE ON A CUSTOMER COMPUTER SYSTEM            |
| 83140171     | Published   |               | 6/30/2010   |            | 13/702023          | US | SYSTEM AND METHOD FOR SELF-SERVICE CONFIGURATION OF AUTHORIZATION                              |
| 83863003     | Published   |               | 10/10/2011  |            | 14/350639          | US | METHODS AND SYSTEMS FOR IDENTIFYING ACTION FOR RESPONDING TO ANOMALY IN CLOUD COMPUTING SYSTEM |
| 83995612     | Published   |               | 4/26/2012   |            | 14/375018          | US | PLATFORM RUNTIME ABSTRACTION                                                                   |
| 83995629     | Published   |               | 4/27/2012   |            | 14/375039          | US | MAPPING APPLICATION DEPENDENCIES AT RUNTIME                                                    |
| 84072005     | Published   |               | 6/8/2012    |            | 14/394597          | US | CLOUD APPLICATION DEPLOYMENT PORTABILITY                                                       |
| 84072881     | Published   |               | 7/31/2012   |            | 14/394656          | US | Orchestrating Hybrid Cloud Services                                                            |
| 84117063     | Published   |               | 6/29/2012   |            | 14/406595          | US | Optimizing Placement of Virtual Machines                                                       |
| 84137269     | Published   |               | 10/8/2012   |            | 14/414185          | US | HYBRID CLOUD ENVIRONMENT                                                                       |
| 84155397     | Application |               | 8/30/2012   |            | 14/419667          | US | GLOBAL FEATURE LIBRARY USEABLE WITH CONTINUOUS DELIVERY                                        |

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| 90063344     | Application |               | 9/25/2015   |            | 14/866444          | US | System And Method For Deploying Software Into A Computing Environment                                |
| 82070939     | Granted     | 7274672       | 10/29/2002  | 9/25/2007  | 10/284058          | US | Data Processing System And Method                                                                    |
| 82071377     | Granted     | 7548985       | 8/26/2003   | 6/16/2009  | 10/649976          | US | SYSTEM FOR MANAGING USER PROFILE DATA                                                                |
| 82075190     | Granted     | 7464185       | 4/30/2002   | 12/9/2008  | 10/135961          | US | METHOD AND APPARATUS FOR TRANSFERRING DATA FROM A SENDING SYSTEM TO A RECEIVING SYSTEM, AND PROGRAM  |
|              |             |               |             |            |                    |    | STORAGE DEVICES                                                                                      |
| 82092542     | Granted     | 7254541       | 10/30/2002  | 8/7/2007   | 10/283498          | US | Systems And Methods For Providing Users With Information In Audible Form                             |
| 82099601     | Published   |               | 7/20/2006   |            | 11/489433          | US | Context-based Event Processing                                                                       |
| 82116953     | Granted     | 6157831       | 10/12/1999  | 12/5/2000  | 08/781261          | US | METHOD AND APPARATUS FOR IMPLEMENTING CONFIGURABLE CALL FORWARDING BINS IN A MOBILE TELEPHONE SYSTEM |
|              |             |               |             |            |                    |    | REAL-TIME MONITORING OF SERVICE AGREEMENTS                                                           |
| 82120637     | Granted     | 8099488       | 4/26/2002   | 40925      | 10/133299          | US | Processing Of Usage Data For First And Second Types Of Usage-based Functions                         |
| 82171835     | Granted     | 7599288       | 9/30/2004   | 10/6/2009  | 10/955628          | US | User Profile Service                                                                                 |
| 82182632     | Granted     | 8554876       | 1/23/2004   | 41555      | 10/763506          | US | Techniques For Improving Collaboration Effectiveness                                                 |
| 82184381     | Granted     | 7406422       | 7/20/2004   | 7/29/2008  | 10/894508          | US | Message-based Communications                                                                         |
| 82186193     | Granted     | 7885284       | 5/13/2005   | 2/8/2011   | 11/587570          | US | Data Retrieval From Computing Systems                                                                |
| 82199927     | Granted     | 7853666       | 1/13/2005   | 12/14/2010 | 11/036080          | US | A Method Or Apparatus For Routing Signaling Messages In A Network                                    |
| 82211165     | Published   |               | 6/29/2006   |            | 11/476548          | US | NETWORK BILLING                                                                                      |
| 82211792     | Granted     | 8260254       | 4/20/2006   | 9/4/2012   | 11/407650          | US | Service Chaining                                                                                     |
| 82211849     | Published   |               | 10/28/2005  |            | 11/262118          | US | Communication System And Method                                                                      |
| 82215662     | Granted     | 8204194       | 6/26/2007   | 6/19/2012  | 11/768429          | US | Call Routing                                                                                         |
| 82222904     | Published   |               | 7/17/2006   |            | 11/487790          | US | Service Routing For Communication Systems                                                            |
| 82229765     | Granted     | 8504018       | 1/29/2008   | 41492      | 12/449244          | US | Communication System And Method Therefor                                                             |
| 82230767     | Granted     | 8064961       | 7/24/2008   | 11/22/2011 | 12/178914          | US | Delivery Of Messages To A Receiver Mobile Device                                                     |
| 82234265     | Granted     | 8325925       | 7/10/2007   | 41247      | 11/775628          | US | Communication Methods And Systems                                                                    |
| 82235825     | Granted     | 8219449       | 11/13/2008  | 41100      | 12/270342          | US | Network Service Provision Method, Network Device, Network Server And Network                         |
| 82243439     | Granted     | 8640199       | 12/12/2008  | 1/28/2014  | 12/333337          | US | Method And System For Managing A Hierarchical Information Base With An Application Layer Protocol    |
| 82247066     | Granted     | 8495169       | 11/4/2008   | 7/23/2013  | 12/264273          | US | Conference-call System And Conference-specific Access Codes                                          |
| 82247375     | Granted     | 8208616       | 1/29/2009   | 6/26/2012  | 12/362036          | US | MANAGE A SHARED COMPUTING RESOURCE BASED ON RESOURCE USE REPORTS                                     |
| 82563072     | Granted     | 8706880       | 2/24/2011   | 4/22/2014  | 13/034531          | US | Communications System And Method                                                                     |
| 82805181     | Published   |               | 1/26/2010   |            | 13/146939          | US |                                                                                                      |

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| 82863306     | Granted     | 8538448       | 3/12/2012   | 9/17/2013  | 13/418012          | US | ROUND ROBIN ASSIGNMENT BASED COMMUNICATION SYSTEM                                                          |
| 82961909     | Published   |               | 1/31/2013   |            | 13/755221          | US | EDITING INFORMATION WITH SLIDER EDIT TOOLS                                                                 |
| 83694963     | Application |               | 10/24/2011  |            | 14/116129          | US | PROVIDE SERVICES USING UNIFIED COMMUNICATION CONTENT                                                       |
| 82000082     | Granted     | 6820098       | 3/15/2002   | 11/16/2004 | 10/099760          | US | System And Method For Efficient And Trackable Asynchronous File Replication                                |
| 82000085     | Granted     | 7185006       | 9/23/2002   | 39140      | 10/251876          | US | Method And Apparatus For Reducing The Scope Of Queues That Seek Information From Networked Computers       |
| 82002266     | Granted     | 7577944       | 3/18/2002   | 8/18/2009  | 10/100525          | US | Unbundling, Translation And Rebundling Of Instruction Bundles In An Instruction Stream                     |
| 82032797     | Granted     | 6285686       | 3/19/1998   | 9/4/2001   | 09/044659          | US | Using Page Registers For Efficient Communication                                                           |
| 82065821     | Granted     | 7590746       | 6/9/2003    | 9/15/2009  | 10/457003          | US | SYSTEMS AND METHODS OF MAINTAINING AVAILABILITY OF REQUESTED NETWORK RESOURCES                             |
| 82166090     | Granted     | 6769057       | 1/22/2001   | 7/27/2004  | 09/766685          | US | System And Method For Determining Operand Access To Data                                                   |
| 82181507     | Granted     | 8370825       | 10/22/2003  | 2/5/2013   | 10/691028          | US | PROGRAM UPDATE PRIOTIZATION ACCORDING TO PRORAM USAGE TRACKING                                             |
| 82189811     | Granted     | 7693145       | 7/23/2005   | 4/6/2010   | 11/187754          | US | Method And Apparatus For Direct Reception Of Inbound Data                                                  |
| 82229393     | Granted     | 8656098       | 7/30/2007   | 2/18/2014  | 11/830175          | US | System And Method For Activating A Raid Disc                                                               |
| 82260176     | Application |               | 1/15/2010   |            | 12/688547          | US | CONFIGURATION TESTS FOR COMPUTER SYSTEM                                                                    |
| 82651104     | Granted     | 8844006       | 9/30/2008   | 9/23/2014  | 13/121662          | US | Authentication Of Services On A Partition                                                                  |
| 81966803     | Granted     | 7000151       | 7/18/2002   | 2/14/2006  | 10/198776          | US | System And Method For Providing Run-time Type Checking                                                     |
| 81971801     | Granted     | 8326965       | 5/3/2001    | 12/4/2012  | 09/848713          | US | Method And Apparatus To Extract The Health Of A Service From A Host Machine                                |
| 81992843     | Granted     | 7007301       | 6/12/2001   | 2/28/2006  | 09/878320          | US | Computer Architecture For An Intrusion Detection System                                                    |
| 82007387     | Granted     | 7343590       | 6/25/2002   | 3/11/2008  | 10/178992          | US | System And Method For Increasing OS Idle Loop Performance In A Simulator                                   |
| 82029239     | Granted     | 6247172       | 7/2/1998    | 6/12/2001  | 09/109467          | US | METHOD FOR A TRANSLATION SYSTEM THAT AGGRESSIVELY OPTIMIZES AND PRESERVES FULL SYNCHRONOUS EXCEPTION STATE |
| 82029797     | Granted     | 6199203       | 7/21/1998   | 3/6/2001   | 09/120261          | US | Memory Management Techniques For On-Line Replaceable Software                                              |
| 82030301     | Granted     | 6202205       | 7/21/1998   | 3/13/2001  | 09/120038          | US | SYSTEM AND METHOD FOR PROFILE-BASED, ON-THE-FLY OPTIMIZATION OF LIBRARY CODE                               |
| 82033298     | Granted     | 6260190       | 8/11/1998   | 7/10/2001  | 09/132558          | US | UNIFIED COMPILER FRAMEWORK FOR CONTROL AND DATA SPECULATION WITH RECOVERY CODE                             |

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| 82033358     | Granted | 6182284       | 9/30/1998   | 1/30/2001  | 09/163677          | US | METHOD AND SYSTEM FOR ELIMINATING PHI INSTRUCTION RESOURCE INTERFERENCES AND REDUNDANT COPY INSTRUCTIONS FROM STATIC-SINGLE -ASSIGNMENT-FOR-COMPUTER CODE                        |
| 82055273     | Granted | 7346699       | 5/24/2000   | 3/18/2008  | 09/578019          | US | Reliable Multicast                                                                                                                                                               |
| 82084805     | Granted | 8271400       | 1/15/2002   | 9/18/2012  | 10/045151          | US | Hardware Pay-per-use                                                                                                                                                             |
| 82089050     | Granted | 7577951       | 5/30/2002   | 8/18/2009  | 10/159528          | US | IMPROVED PERFORMANCE OF COMPUTER PROGRAMS WHILE THEY ARE RUNNING                                                                                                                 |
| 82093352     | Granted | 7360219       | 12/13/2002  | 4/15/2008  | 10/318822          | US | Systems And Methods For Facilitating Fair And Efficient Scheduling Of Processes Among Multiple Resources In A Computer System                                                    |
| 82101842     | Granted | 7995497       | 2/27/2003   | 8/9/2011   | 10/375459          | US | Spontaneous Topology Discovery In A Multi-node Computer System                                                                                                                   |
| 82103468     | Granted | 8533828       | 1/21/2003   | 9/10/2013  | 10/349385          | US | A System For Protecting Security Of A Provisionable Network                                                                                                                      |
| 82106279     | Granted | 7849320       | 11/25/2003  | 12/7/2010  | 10/723119          | US | Method And System For Establishing A Consistent Password Policy                                                                                                                  |
| 82110398     | Granted | 6247059       | 9/8/1998    | 6/12/2001  | 09/149751          | US | TRANSACTION STATE BROADCAST METHOD USING A TWO-STAGE MULTICAST IN A MULTIPLE PROCESSOR CLUSTER HAVING A SENDER TIME OF LIFE MARKER USED BY RECEIVER TO REQUEST RESYNCHRONIZATION |
| 82110458     | Granted | 6266698       | 7/31/1998   | 7/24/2001  | 09/127658          | US | LOGGING OF TRANSACTION BRANCH INFORMATION FOR IMPLEMENTING PRESUMED NOTHING AND OTHER PROTOCOLS                                                                                  |
| 82110587     | Granted | 6099098       | 8/14/1998   | 8/8/2000   | 09/134080          | US | SELF-LOCKING MOUNTING APPARATUS                                                                                                                                                  |
| 82110710     | Granted | 6249756       | 12/7/1998   | 6/19/2001  | 09/206481          | US | HYBRID FLOW CONTROL                                                                                                                                                              |
| 82110713     | Granted | 6175882       | 12/7/1998   | 1/16/2001  | 09/206593          | US | NETWORK SYSTEM FOR A FIRST MODULE PORT AUTO CONFIGURING SAME MODE AS A SECOND MODULE PORT                                                                                        |
| 82115141     | Granted | 5867501       | 6/7/1995    | 2/2/1999   | 08/477807          | US | A ENCODING FOR COMMUNICATING DATA AND COMMANDS                                                                                                                                   |
| 82116827     | Granted | 5875291       | 4/11/1997   | 2/23/1999  | 08/840138          | US | METHOD AND APPARATUS FOR CHECKING TRANSACTIONS IN A COMPUTER SYSTEM                                                                                                              |
| 82117454     | Granted | 6782399       | 6/15/2001   | 8/24/2004  | 09/883066          | US | ULTRA-HIGH SPEED DATABASE REPLICATION WITH MULTIPLE AUDIT LOGS                                                                                                                   |
| 82118699     | Granted | 7293102       | 3/26/2002   | 11/6/2007  | 10/106279          | US | METHOD AND APPARATUS FOR STORING DATA AND REPLAYING STORED DATA IN A TEMPORALLY ACCURATE MANNER                                                                                  |
| 82121762     | Granted | 7168001       | 2/6/2004    | 1/23/2007  | 10/774267          | US | Transaction Processing Apparatus And Method                                                                                                                                      |

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|--------------|---------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82130192     | Granted | 5913058       | 9/30/1997   | 6/15/1999  | 08/941623          | US | "SYSTEM AND METHOD FOR USING A REAL MODE BIOS INTERFACE TO READ PHYSICAL DISK SECTORS AFTER THE OPERATING SYSTEM HAS LOADED AND BEFORE THE OPERATING SYSTEM DEVICE DRIVERS HAVE LOADED" |
| 82131629     | Granted | 6178473       | 10/15/1998  | 1/23/2001  | 09/173438          | US | SYSTEM FOR SELECTIVELY INCREMENTING A COUNT NUMBER OF AN ASSOCIATED NODE ONLY WHEN THE NODE IS PUT IN USE IN CONJUNCTION WITH A SUCCESSFUL COMPARE AND SWAP OPERATION                   |
| 82132496     | Granted | 6158000       | 9/18/1998   | 12/5/2000  | 09/158165          | US | SHARED MEMORY INITIALIZATION METHOD FOR SYSTEMS HAVING MULTIPLE PROCESSOR CAPABILITY                                                                                                    |
| 82135247     | Granted | 6098179       | 1/22/1998   | 8/1/2000   | 09/010899          | US | METHOD AND APPARATUS FOR PERFORMING ERROR DETECTION                                                                                                                                     |
| 82162901     | Granted | 5960383       | 2/25/1997   | 9/28/1999  | 08/805780          | US | EXTRACTION OF KEY SECTIONS FROM TEXTS USING AUTOMATIC INDEXING TECHNIQUES                                                                                                               |
| 82173578     | Granted | 8179784       | 7/16/2004   | 5/15/2012  | 10/893612          | US | Method And Apparatus For Recovering A Communications Connection                                                                                                                         |
| 82174952     | Granted | 7606194       | 2/20/2004   | 10/20/2009 | 10/783637          | US | Method And Apparatus For Registering A Mobile Node With A Home Agent                                                                                                                    |
| 82179326     | Granted | 7356678       | 1/12/2004   | 4/8/2008   | 10/756431          | US | Security Measures In A Partitionable Computing System                                                                                                                                   |
| 82179383     | Granted | 7904910       | 7/19/2004   | 3/8/2011   | 10/893825          | US | Cluster System And Method For Operating Cluster Nodes                                                                                                                                   |
| 82179764     | Granted | 7383429       | 12/18/2003  | 6/3/2008   | 10/739540          | US | Configuring Settings Of A Computer System To Be Compatible With An Operating System                                                                                                     |
| 82181510     | Granted | 7536684       | 12/29/2003  | 5/19/2009  | 10/747535          | US | Software Documentation Generation Using Differential Upgrade Documentation                                                                                                              |
| 82181630     | Granted | 7383290       | 3/9/2004    | 6/3/2008   | 10/797258          | US | TRANSACTION PROCESSING SYSTEMS AND METHODS UTILIZING NON-DISK PERSISTENT MEMORY                                                                                                         |
| 82183379     | Granted | 7426622       | 3/10/2004   | 9/16/2008  | 10/798710          | US | Rapid Locality Selection For Efficient Memory Allocation                                                                                                                                |
| 82184942     | Granted | 7325156       | 10/7/2004   | 1/29/2008  | 10/961500          | US | Methods And Apparatus For Backing Up Data In A Data Center                                                                                                                              |
| 82186253     | Granted | 7876689       | 6/29/2005   | 1/25/2011  | 11/171297          | US | Method And Apparatus For Load Balancing Network Interface Adapters Based On Network Information                                                                                         |
| 82187003     | Granted | 7903571       | 7/9/2004    | 3/8/2011   | 10/887731          | US | System And Method For Improving Multi-node Processing                                                                                                                                   |
| 82187564     | Granted | 7743383       | 11/1/2004   | 6/22/2010  | 10/979407          | US | Adaptive Cooperative Scheduling                                                                                                                                                         |
| 82188188     | Granted | 8463879       | 7/16/2004   | 6/11/2013  | 10/893617          | US | Method And Apparatus For Automatic Verification Of A Machine-readable Map Of Networked Devices                                                                                          |
| 82192370     | Granted | 7434098       | 1/25/2005   | 10/7/2008  | 11/042981          | US | Method And System Of Determining Whether A User Program Has Made A System Level Call                                                                                                    |
| 82195493     | Granted | 7594128       | 7/29/2005   | 9/22/2009  | 11/193834          | US | Systems And Methods To Determine Processor Utilization                                                                                                                                  |

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| 82195928     | Granted | 7350007       | 4/5/2005    | 3/25/2008  | 11/098803          | US | TIME-INTERVAL-BASED SYSTEM AND METHOD TO DETERMINE IF A DEVICE ERROR RATE EQUALS OR EXCEEDS A THRESHOLD ERROR RATE                                    |
| 82197740     | Granted | 7743380       | 1/21/2005   | 6/22/2010  | 11/040768          | US | Monitoring Clustered Software Applications                                                                                                            |
| 82202108     | Granted | 7426684       | 4/29/2005   | 9/16/2008  | 11/118929          | US | Lost-cycle Measurement Using Cycle Counter                                                                                                            |
| 82203044     | Granted | 7730350       | 2/3/2006    | 6/1/2010   | 11/346737          | US | Method And System Of Determining The Execution Point Of Programs Executed In Lock Step                                                                |
| 82203047     | Granted | 7549082       | 2/3/2006    | 6/16/2009  | 11/350315          | US | Method And System Of Bringing Processors To The Same Computational Point                                                                              |
| 82204670     | Granted | 7724985       | 10/27/2005  | 5/25/2010  | 11/261199          | US | DEVICE STORING VECTOR IMAGE WITH EMBEDDED IMAGE STYLE IDENTIFIER, AND METHODS AND UTILITIES FOR FORMATTING A DEVICE IMAGE WITH IMAGE STYLE ATTRIBUTES |
| 82206293     | Granted | 7689663       | 7/28/2005   | 3/30/2010  | 11/191639          | US | Embedded Web-based Management Method                                                                                                                  |
| 82206791     | Granted | 7330942       | 12/29/2004  | 2/12/2008  | 11/027553          | US | Method For Efficient Virtualization Of Physical Memory In A Virtual-machine Monitor                                                                   |
| 82209107     | Granted | 7895596       | 9/13/2005   | 2/22/2011  | 11/224849          | US | Processor Assignment In Multi-processor Systems                                                                                                       |
| 82209788     | Granted | 7739548       | 6/27/2006   | 6/15/2010  | 11/475443          | US | Determining Actual Power Consumption For System Power Performance States                                                                              |
| 82209791     | Granted | 7607030       | 6/27/2006   | 10/20/2009 | 11/475765          | US | METHOD AND APPARATUS FOR ADJUSTING POWER CONSUMPTION DURING SERVER INITIAL SYSTEM POWER PERFORMANCE STATE                                             |
| 82210226     | Granted | 8799432       | 10/31/2006  | 8/5/2014   | 11/590395          | US | Managed Computer Network Caching Requested And Related Data From Remote Computers                                                                     |
| 82214159     | Granted | 7672923       | 10/31/2006  | 3/2/2010   | 11/591082          | US | GRID NETWORK MANAGEMENT VIA AUTOMATIC TREND ANALYSIS OF A SERVICE LEVEL AGREEMENT.                                                                    |
| 82215473     | Granted | 8286244       | 1/14/2008   | 10/9/2012  | 12/013890          | US | Method And System For Protecting A Computer Network Against Packet Floods                                                                             |
| 82215656     | Granted | 7734960       | 7/20/2007   | 6/8/2010   | 11/878129          | US | Method Of Managing Nodes In Computer Cluster                                                                                                          |
| 82216469     | Granted | 7698545       | 4/24/2006   | 4/13/2010  | 11/409754          | US | Computer Configuration Chronology Generator                                                                                                           |
| 82216472     | Granted | 8108836       | 10/13/2006  | 1/31/2012  | 11/580649          | US | System And Method For Defining Software Management                                                                                                    |
| 82216655     | Granted | 7872965       | 8/22/2005   | 1/18/2011  | 11/208690          | US | Network Resource Teaming Providing Resource Redundancy And Transmit/receive Load-balancing Through A Plurality Of Redundant Port Trunks               |
| 82217159     | Granted | 8069371       | 4/25/2008   | 11/29/2011 | 12/110180          | US | Method And System For Remotely Debugging A Hung Or Crashed Computing System                                                                           |
| 82219718     | Granted | 7743244       | 10/31/2006  | 6/22/2010  | 11/590025          | US | Computer System Model Generation With Tracking Of Actual Computer System Configuration                                                                |
| 82219967     | Granted | 8141066       | 12/14/2007  | 3/20/2012  | 12/000645          | US | Cross-platform Architecture For Replicating Profiling Scheme In A Computer System                                                                     |

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| 82220027     | Granted     | 8510450       | 4/22/2006   | 8/13/2013  | 11/408375          | US | Reconciliation Of Web Server Session States With Client Browser States                                           |
| 82220525     | Granted     | 8132171       | 12/22/2006  | 3/6/2012   | 11/615935          | US | Method Of Controlling Thread Access To A Synchronization Object                                                  |
| 82224527     | Granted     | 8739143       | 1/31/2007   | 41786      | 11/700566          | US | PROFILING METRICS FOR COMPUTER PROGRAMS                                                                          |
| 82225901     | Granted     | 8775122       | 2/28/2007   | 7/8/2014   | 11/680620          | US | UTILIZATION REPORTING WITH MULTIPLE TIME FRAMES                                                                  |
| 82227581     | Granted     | 8799547       | 7/7/2008    | 8/5/2014   | 12/668409          | US | Data Packet Processing Method For A Multi Core Processor                                                         |
| 82228148     | Granted     | 8032570       | 7/17/2008   | 10/4/2011  | 12/175292          | US | An Efficient Stacked File System And Method                                                                      |
| 82228955     | Granted     | 8041692       | 4/8/2008    | 10/18/2011 | 12/099643          | US | System And Method For Processing Concurrent File Systems Write Requests                                          |
| 82229519     | Granted     | 8464024       | 4/27/2007   | 6/11/2013  | 11/796665          | US | VIRTUAL ADDRESS HASHING                                                                                          |
| 82229708     | Granted     | 8156502       | 6/8/2007    | 4/10/2012  | 11/760635          | US | Computer Resource Allocation As A Function Of Demand Type                                                        |
| 82230644     | Granted     | 7689577       | 4/16/2007   | 3/30/2010  | 11/787612          | US | REARRANGING DATA SECTIONS WITHIN A PAGE FILE                                                                     |
| 82233077     | Published   |               | 6/17/2008   |            | 12/140278          | US | Data Processing System And Method                                                                                |
| 82233830     | Granted     | 7827266       | 7/31/2007   | 11/2/2010  | 11/831736          | US | System And Method Of Controlling Multiple Computer Platforms                                                     |
| 82233953     | Granted     | 8359467       | 7/7/2007    | 1/22/2013  | 11/774570          | US | Access Control System And Method                                                                                 |
| 82235327     | Granted     | 8250581       | 10/28/2007  | 8/21/2012  | 11/926087          | US | Allocating Computer Resources To Candidate Recipient Computer Workloads According To Expected Marginal Utilities |
| 82235765     | Granted     | 8219595       | 9/22/2008   | 7/10/2012  | 12/234764          | US | System And Method For Efficient Remote Data Access For Server Management                                         |
| 82237886     | Granted     | 8719830       | 8/21/2008   | 41765      | 12/195934          | US | SYSTEM AND METHOD FOR ALLOWING EXECUTING APPLICATION IN COMPARTMENT THAT ALLOW ACCESS TO RESOURCES               |
| 82247372     | Granted     | 8826138       | 1/28/2009   | 41884      | 12/361449          | US | VIRTUAL CONNECT DOMAIN GROUPS                                                                                    |
| 82248062     | Granted     | 8615641       | 6/24/2009   | 41632      | 12/490332          | US | System And Method For Differential Backup                                                                        |
| 82258421     | Application |               | 3/17/2009   |            | 12/406059          | US | ALLOCATING MASS STORAGE TO A LOGICAL SERVER                                                                      |
| 82261919     | Granted     | 8356198       | 3/30/2010   | 41289      | 12/749784          | US | Performing Power Management Based On Information Regarding Zones Of Devices In A System                          |
| 82852217     | Granted     | 8713297       | 12/1/2009   | 4/29/2014  | 13/258384          | US | DECREMENTING POWER-CAP SETTINGS WHEN POWER CAP IS EXCEEDED                                                       |
| 82852274     | Granted     | 8838765       | 12/14/2009  | 9/16/2014  | 13/258496          | US | MODIFYING COMPUTER MANAGEMENT REQUEST                                                                            |
| 83123503     | Granted     | 9037538       | 5/13/2010   | 5/19/2015  | 13/642062          | US | FILE SYSTEM MIGRATION                                                                                            |
| 83276232     | Published   |               | 7/25/2013   |            | 13/951100          | US | Preserving Object Code Translations Of A Library For Future Reuse By An Emulator                                 |
| 84074258     | Published   |               | 10/21/2014  |            | 14/519670          | US | License Prerequisite Solution for Central-Management Products                                                    |

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| 84141723     | Published   |               | 2/25/2015   |            | 14/631286          | US | ABSTRACTING A MULTITHREADED PROCESSOR CORE TO A SINGLE THREADED PROCESSOR CORE                                                                         |
| 84210917     | Application |               | 1/27/2013   |            | 14/440214          | US | SOCKET STATE TRANSFER                                                                                                                                  |
| 84289251     | Application |               | 8/5/2015    |            | 14/819039          | US | Computer Workload Redistribution Schedule                                                                                                              |
| 81967118     | Granted     | 6750403       | 4/18/2002   | 6/15/2004  | 10/125246          | US | Reconfigurable Multilayer Printed Circuit Board                                                                                                        |
| 81973298     | Granted     | 6285547       | 5/1/2000    | 9/4/2001   | 09/562878          | US | Bracket For Retaining Computer Components Within A Housing                                                                                             |
| 81997832     | Granted     | 6456501       | 7/30/2001   | 9/24/2002  | 09/918765          | US | Quick Release Mechanism For Sliding Rail                                                                                                               |
| 82004201     | Granted     | D472880       | 7/23/2001   | 4/8/2003   | 29/145446          | US | Electrical Contact                                                                                                                                     |
| 82019687     | Granted     | 6199147       | 3/20/2000   | 3/6/2001   | 09/528583          | US | Distributed-memory multiprocessor computer system with directory-based cache coherency with ambiguous mappings of cached data to main-memory locations |
|              |             |               |             |            |                    |    | OPTIMIZING DATA MOVEMENT WITH HARDWARE OPERATIONS                                                                                                      |
| 82025057     | Granted     | 5966733       | 6/24/1997   | 10/12/1999 | 08/881346          | US | Ejection System And Method For On Line Removal Of Edge Connector Cards                                                                                 |
| 82029800     | Granted     | 6169662       | 10/24/1997  | 1/2/2001   | 08/957221          | US | INTEGRATED MICRO-CONTROLLER AND PROGRAMMABLE DEVICE                                                                                                    |
| 82045283     | Granted     | 7409531       | 10/29/1999  | 8/5/2008   | 09/430192          | US | Circuit Board Support Arrangement, Method, And Method For Using The Same                                                                               |
| 82085048     | Granted     | 6822878       | 10/9/2002   | 11/23/2004 | 10/267768          | US | Employment Of An Over-bent Ledge Of A Rack Component To Support An Over-bent Ledge Of A Drop-in Chassis                                                |
| 82086548     | Granted     | 6807062       | 11/7/2002   | 10/19/2004 | 10/289975          | US | System And Method For Protection Of Equipment During Motion Anomalies                                                                                  |
| 82088174     | Granted     | 6879931       | 10/3/2002   | 4/12/2005  | 10/264194          | US | Systems And Methods For Increasing The Difficulty Of Data Sniffing                                                                                     |
| 82088237     | Granted     | 7370209       | 1/30/2003   | 5/6/2008   | 10/354759          | US | System And Method For Controlling Vibration                                                                                                            |
| 82090856     | Granted     | 7299141       | 12/5/2002   | 11/20/2007 | 10/310633          | US | Cable Extension For Reducing EMI Emissions                                                                                                             |
| 82091672     | Granted     | 6867362       | 3/7/2003    | 3/15/2005  | 10/383412          | US | System And Method For Using An Operating System Defined Field In ACPI Support Multiple Operating Systems                                               |
| 82093043     | Granted     | 6986032       | 8/7/2002    | 1/10/2006  | 10/212718          | US | Rack Mount Computer Workstation                                                                                                                        |
| 82095728     | Granted     | D480078       | 10/21/2002  | 9/30/2003  | 29/169495          | US | Method And Apparatus For Dumping Memory                                                                                                                |
| 82096163     | Granted     | 7437524       | 3/11/2005   | 10/14/2008 | 11/077665          | US | Assembly For Toolless Installation And Locking Of A Printed Circuit Carrier To A System                                                                |
| 82101158     | Granted     | 6999321       | 11/25/2003  | 2/14/2006  | 10/722338          | US | Pivot Component Coupled With First Circuit Board For Control Of Relative Alignment Of First Circuit Board                                              |
| 82101161     | Granted     | 6896539       | 6/30/2003   | 5/24/2005  | 10/610144          | US | Connection Component With Second Circuit Board                                                                                                         |
|              |             |               |             |            |                    |    | Connection Component                                                                                                                                   |
| 82107587     | Granted     | D482691       | 7/26/2002   | 11/25/2003 | 29/164607          | US | SERVER BLADE                                                                                                                                           |
| 82107590     | Granted     | D483033       | 7/26/2002   | 12/2/2003  | 29/164606          | US | ENCLOSURE FOR SERVER BLADES                                                                                                                            |

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| 82117829     | Granted   | D455752       | 2/14/2001   | 4/16/2002  | 29/137162 US       | US | Front Panel For A Drive Carrier                                                                                         |
| 82127816     | Granted   | 6069796       | 10/6/1998   | 5/30/2000  | 09/167631 US       | US | SECURING A CARD IN AN ELECTRONIC DEVICE                                                                                 |
| 82128875     | Granted   | 5896273       | 12/31/1996  | 4/20/1999  | 08/777819 US       | US | MODULAR COMPUTER CHASSIS INTERCHANGEABLE BETWEEN STAND ALONE AND RACK MOUNTED STATES                                    |
| 82134995     | Granted   | 6249520       | 10/24/1997  | 6/19/2001  | 08/957664 US       | US | HIGH-PERFORMANCE NON-BLOCKING SWITCH WITH MULTIPLE CHANNEL ORDERING CONSTRAINTS                                         |
| 82135370     | Granted   | 6205521       | 11/3/1997   | 3/20/2001  | 08/963661 US       | US | INCLUSION MAP FOR ACCELERATED CACHE FLUSH                                                                               |
| 82136936     | Granted   | 6298425       | 1/12/1999   | 10/2/2001  | 09/228662 US       | US | COMPUTER DISK MANAGEMENT SYSTEM USING DOUBLE-BUFFERING                                                                  |
| 83705282     | Published |               | 12/3/2013   |            | 14/095672 US       | US | SQL Query on a NoSQL Database                                                                                           |
| 84249337     | Published |               | 5/26/2015   |            | 14/721273 US       | US | PROPAGATING A SNAPSHOT ATTRIBUTE IN A DISTRIBUTED FILE SYSTEM                                                           |
| 81974174     | Granted   | 6820072       | 8/22/2000   | 11/16/2004 | 09/644117 US       | US | Validation Of Probabilistic Troubleshooters And Diagnostic Systems                                                      |
| 81980102     | Granted   | 6845390       | 11/10/2000  | 1/18/2005  | 09/710728 US       | US | Server-Side State Replication Among Collaborating World Wide Web Servers                                                |
| 81987659     | Granted   | 6879973       | 1/11/2001   | 4/12/2005  | 09/758891 US       | US | Automated Diagnosis Of Printer Systems Using Bayesian Networks                                                          |
| 81988406     | Granted   | 7107313       | 4/13/2001   | 9/12/2006  | 09/833573 US       | US | ADDING AND REMOVING PROCESSES IN A SINGLE VIEW                                                                          |
| 81990341     | Granted   | 704362        | 10/10/2001  | 5/16/2006  | 09/975623 US       | US | Electronic Ticketing System And Method                                                                                  |
| 81997898     | Granted   | 7020875       | 2/15/2002   | 3/28/2006  | 10/077603 US       | US | MECHANISM FOR SELECTING REPRESENTATIVES FROM PROGRAM PATCH CHAINS BASED ON USER ROLES                                   |
| 82007201     | Granted   | 7583607       | 3/6/2003    | 9/1/2009   | 10/379662 US       | US | Method And Apparatus For Designating And Implementing Support Level Agreements                                          |
| 82035353     | Granted   | 6185589       | 7/31/1998   | 2/6/2001   | 09/127185 US       | US | AUTOMATIC BANNER RESIZING FOR VARIABLE-WIDTH WEB PAGES USING VARIABLE WIDTH CELLS OF HTML TABLE                         |
| 82057394     | Granted   | 6587827       | 10/22/1999  | 7/1/2003   | 09/425378 US       | US | Order Fulfillment Processing System                                                                                     |
| 82072313     | Granted   | 7356738       | 6/6/2005    | 4/8/2008   | 11/146775 US       | US | Electronic Apparatus Having Improved Diagnostic Interface                                                               |
| 82095977     | Granted   | 7016889       | 1/30/2003   | 3/21/2006  | 10/355498 US       | US | System And Method For Identifying Useful Content In A Knowledge Repository                                              |
| 82106525     | Granted   | 7603668       | 1/9/2004    | 10/13/2009 | 10/755112 US       | US | Determining The Applicability Of Patches For Installation On A Computer System                                          |
| 82106528     | Granted   | 7451440       | 1/9/2004    | 11/11/2008 | 10/755113 US       | US | PATCH APPLICATION THAT ENABLES THE IDENTIFICATION OF PATCHES FOR INSTALLATION ON A COMPUTER SYSTEM IN A REACTIVE MANNER |
| 82210355     | Granted   | 7536268       | 6/21/2005   | 5/19/2009  | 11/157572 US       | US | Collecting Information To Identify Defective Locations Of A Display Monitor                                             |
| 82212536     | Granted   | 8914668       | 3/3/2006    | 12/16/2014 | 11/367653 US       | US | Vendor-neutral Policy Based Mechanism For Enabling Firewall Service In An MPLS-VPN Service Network                      |

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| 82214036     | Application |               | 10/31/2005  |            | 11/263712          | US | Discovery Of And Sharing Of Content Within A Sharing Neighborhood Of A Network                                                                                       |
| 82231640     | Granted     | 7970585       | 6/29/2007   | 6/28/2011  | 11/771504          | US | METHOD AND SYSTEM FOR REMOTE MONITORING AND CONTROL OF WIRELESS CELL-SITES                                                                                           |
| 82240256     | Published   |               | 8/27/2008   |            | 12/198896          | US | System And Method For Concurrence Control Of Logical Grouped Shared Objects In A Multi-user Environment                                                              |
| 83099441     | Published   |               | 1/31/2013   |            | 13/755819          | US | EXTENSIBLE MODEL FOR IT RESOURCE CHARGEBACK                                                                                                                          |
| 84019774     | Published   |               | 4/27/2012   |            | 14/387985          | US | DATA CENTER SERVICE ORIENTED NETWORKING                                                                                                                              |
| 82092731     | Granted     | 8694394       | 11/19/2001  | 41737      | 10/495634          | US | Methods, Data Record, Software Interface, Data Warehouse Module And Software Application For Exchanging Transaction tax-related Data                                 |
| 82184633     | Granted     | 8015086       | 9/13/2005   | 9/6/2011   | 11/226532          | US | System And Method For Calculating Employee Expenses                                                                                                                  |
| 82194869     | Granted     | 8131603       | 10/12/2004  | 40974      | 10/964527          | US | Determining, Storing, And Analyzing Product Country Classifications                                                                                                  |
| 83992847     | Published   |               | 4/23/2012   |            | 14/373613          | US | INFLUENCE SCORES FOR SOCIAL MEDIA PROFILES                                                                                                                           |
| 81952571     | Granted     | 6182176       | 2/24/1994   | 36921      | 08/201185          | US | QUEUE-BASED PREDICTIVE FLOW CONTROL MECHANISM                                                                                                                        |
| 81958499     | Granted     | 6074428       | 10/19/1994  | 6/13/2000  | 08/325765          | US | Minimizing Logic By Resolving "Don't Care" Output Values In A Finite State Machine                                                                                   |
| 81966995     | Granted     | 7065137       | 1/24/2002   | 6/20/2006  | 10/056659          | US | DIFFERENCE MESSAGING PROTOCOL THAT USES PRIOR STATE INFORMATION                                                                                                      |
| 81968303     | Granted     | 6636960       | 2/16/2000   | 10/21/2003 | 09/505093          | US | Method And Apparatus For Resteering Failing Speculation Check Instructions                                                                                           |
| 81968864     | Granted     | 6591393       | 2/18/2000   | 7/8/2003   | 09/507208          | US | Masking Error Detection/Correction Latency In Multilevel Cache Transfers                                                                                             |
| 81970055     | Granted     | 7400591       | 6/1/2005    | 39644      | 11/142643          | US | METHOD OF CREATING AN ADDRESS AND A DISCONTIGUOUS MASK FOR A NETWORK SECURITY POLICY AREA                                                                            |
| 81972047     | Granted     | 6665818       | 4/27/2000   | 12/16/2003 | 09/560659          | US | Apparatus And Method For Detecting, Diagnosing, And Handling Deadlock Errors                                                                                         |
| 81972551     | Granted     | 6654760       | 6/4/2001    | 37950      | 09/874586          | US | System And Method Of Providing A Cache-Efficient, Hybrid, Compressed Digital Tree With Wide Dynamic Ranges And Simple Interface Requiring No Configuration Or Tuning |
| 81974798     | Granted     | 7143268       | 12/29/2000  | 39049      | 09/751674          | US | Circuit And Method For Instruction Compression And Dispersal In Wide-issue Processors                                                                                |
| 81976979     | Granted     | 6662289       | 5/15/2001   | 37964      | 09/858850          | US | Method And Apparatus For Direct Conveyance Of Physical Addresses From User Level Code To Peripheral Devices In Virtual Memory Systems                                |
| 81976982     | Granted     | 7360054       | 10/23/2003  | 39553      | 10/693147          | US | Method And Apparatus For Direct Conveyance Of Physical Addresses From User Level Code To Peripheral Devices In Virtual Memory Systems                                |

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| 81979856     | Granted | 6694457       | 3/6/2001    | 38034      | 09/799999          | US | System And Method For Monitoring Execution Of Privileged Instructions                                         |
| 81984224     | Granted | 6738783       | 2/9/2001    | 38125      | 09/779968          | US | Dynamically Configurable Generic Container                                                                    |
| 81986348     | Granted | 7240324       | 2/28/2001   | 39266      | 09/797536          | US | Event-based Scheduling Method And System For Workflows Activities                                             |
| 81993026     | Granted | 6696906       | 5/30/2001   | 2/24/2004  | 09/870839          | US | LOW DIELECTRIC LOSS SIGNAL LINE HAVING A CONDUCTIVE TRACE SUPPORTED BY FILAMENTS                              |
| 81993218     | Granted | 7237037       | 10/1/2001   | 39259      | 09/969369          | US | Combined Message Broker                                                                                       |
| 81993527     | Granted | 6715101       | 3/15/2001   | 38076      | 09/810103          | US | Redundant Controller Data Storage System Having An Online Controller Removal System And Method                |
| 81994154     | Granted | 7051166       | 4/21/2003   | 5/23/2006  | 10/419477          | US | DIRECTORY-BASED CACHE COHERENCY SCHEME FOR REDUCING MEMORY BANDWIDTH LOSS                                     |
| 81994586     | Granted | 6957202       | 5/26/2001   | 10/18/2005 | 09/866411          | US | MODEL SELECTION FOR DECISION SUPPORT SYSTEMS                                                                  |
| 81995087     | Granted | 6918021       | 4/9/2002    | 7/12/2005  | 10/118801          | US | System Of And Method For Flow Control Within A Tag Pipeline                                                   |
| 81995900     | Granted | 6675242       | 3/17/2001   | 1/6/2004   | 09/811196          | US | COMMUNICATION BUS CONTROLLER INCLUDING DESIGNATION OF PRIMARY AND SECONDARY STATUS ACCORDING TO SLOT POSITION |
| 81997961     | Granted | 6789312       | 7/30/2001   | 9/14/2004  | 09/918764          | US | BOLSTER PLATE BOW COMPENSATION                                                                                |
| 82000829     | Granted | 6731136       | 11/1/2001   | 5/4/2004   | 10/002813          | US | Differential CMOS Logic With Dynamic Bias                                                                     |
| 82002206     | Granted | 6967350       | 4/2/2002    | 11/22/2005 | 10/116497          | US | Memory Structures                                                                                             |
| 82002326     | Granted | 6627092       | 7/27/2001   | 37894      | 09/917093          | US | Method For The Fabrication Of Electrical Contacts                                                             |
| 82002458     | Granted | 7318120       | 12/24/2004  | 1/8/2008   | 11/023091          | US | Hardware Assisted Communication Between Processors                                                            |
| 82003517     | Granted | 6831861       | 1/12/2004   | 12/14/2004 | 10/756450          | US | Methods And Memory Structures Using Tunnel-Junction Device As Control Element                                 |
| 82003955     | Granted | 6643159       | 4/2/2002    | 37929      | 10/116213          | US | Cubic Memory Array                                                                                            |
| 82011821     | Granted | 6091896       | 12/22/1995  | 7/18/2000  | 08/577364          | US | Debugging Optimized Code Using Data Change Points                                                             |
| 82012379     | Granted | 5797013       | 11/29/1995  | 36025      | 08/564514          | US | Intelligent Loop Unrolling                                                                                    |
| 82014191     | Granted | 5760610       | 3/1/1996    | 35948      | 08/609306          | US | QUALIFIED UNIVERSAL CLOCK BUFFER CIRCUIT FOR GENERATING HIGH GAIN, LOW SKEW LOCAL CLOCK SIGNALS               |
| 82015439     | Granted | 5818364       | 6/19/1996   | 10/6/1998  | 08/666964          | US | High Bit-Rate Huffman Decoding                                                                                |
| 82017626     | Granted | 5901157       | 10/29/1996  | 5/4/1999   | 08/744717          | US | Method And Apparatus For Reducing The Access Time For Storage Systems                                         |
| 82017812     | Granted | 5850553       | 11/12/1996  | 12/15/1998 | 08/747054          | US | Reducing The Number Of Executed Branch Instructions In A Code Sequence                                        |
| 82026119     | Granted | 6088525       | 6/19/1997   | 7/11/2000  | 08/878958          | US | Loop Profiling By Instrumentation                                                                             |
| 82030484     | Granted | 6282143       | 5/26/1998   | 8/28/2001  | 09/084689          | US | MULTI-PORT STATIC RANDOM ACCESS MEMORY DESIGN FOR COLUMN INTERLEAVED ARRAYS                                   |
| 82031111     | Granted | 6470374       | 2/21/2000   | 37551      | 09/510129          | US | Carry Look-ahead For Bi-endian Adder                                                                          |

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| 82032671     | Granted | 6457645       | 4/13/1999   | 10/1/2002  | 09/290842          | US | Optical Assembly Having Lens Offset From Optical Axis                                                                                                                   |
| 82035920     | Granted | 6154769       | 3/27/1998   | 36858      | 09/049688          | US | Scheduling Server Requests To Decrease Response Time                                                                                                                    |
| 82040786     | Granted | 7596694       | 3/8/2004    | 9/29/2009  | 10/796690          | US | Increase Server Throughput                                                                                                                                              |
| 82040978     | Granted | 6243668       | 8/7/1998    | 37047      | 09/131187          | US | SYSTEM AND METHOD FOR SAFELY EXECUTING DOWNLOADED CODE ON A COMPUTER SYSTEM                                                                                             |
| 82041722     | Granted | 6941569       | 12/3/2002   | 38601      | 10/308836          | US | INSTRUCTION SET INTERPRETER WHICH USES A REGISTER STACK TO EFFICIENTLY MAP AN APPLICATION REGISTER STATE                                                                |
| 82043099     | Granted | 6153946       | 10/30/1998  | 36858      | 09/183333          | US | SYSTEM AND METHOD UTILIZING A CONDUCTIVE BRUSH FOR PROVIDING POWER SIGNALS TO A CARTRIDGE ACCESS DEVICE                                                                 |
| 82045286     | Granted | 6704842       | 4/12/2000   | 38055      | 09/548009          | US | METHOD AND APPARATUS FOR PROVIDING REDUNDANT POWER BY CONNECTING POWER SUPPLIES INTO A SEGMENT OR RING                                                                  |
| 82046777     | Granted | 6118598       | 4/13/1999   | 9/12/2000  | 09/290949          | US | Multi-processor System With Proactive Speculative Data Transfer                                                                                                         |
| 82048028     | Granted | 6751677       | 8/24/1999   | 6/15/2004  | 09/379755          | US | Method And Apparatus For Setting Focus In An Imaging Device                                                                                                             |
| 82049213     | Granted | 6166946       | 1/21/2000   | 12/26/2000 | 09/489380          | US | Method And Apparatus For Allowing A Secure And Transparent Communication Between A User Device And Servers Of A Data Access Network System Via A Firewall And A Gateway |
| 82051964     | Granted | 6675209       | 7/19/1999   | 1/6/2004   | 09/356477          | US | System And Method For Writing To And Reading From A Memory Cell                                                                                                         |
| 82055018     | Granted | 6697330       | 11/26/1999  | 2/24/2004  | 09/449841          | US | METHOD AND SYSTEM FOR ASSIGNING PRIORITY AMONG NETWORK SEGMENTS                                                                                                         |
| 82057268     | Granted | 6681322       | 11/26/1999  | 1/20/2004  | 09/449846          | US | Method And System For Output Flow Control In Network Multiplexers                                                                                                       |
| 82082426     | Granted | 6746892       | 8/8/2003    | 6/8/2004   | 10/637941          | US | METHOD AND APPARATUS FOR EMULATING AN INSTRUCTION SET EXTENSION IN A DIGITAL COMPUTER SYSTEM                                                                            |
| 82083239     | Granted | 7266598       | 10/22/2002  | 9/4/2007   | 10/278508          | US | LOW HEAT LOSS AND SMALL CONTACT AREA COMPOSITE ELECTRODE FOR A PHASE CHANGE MEDIA MEMORY DEVICE                                                                         |
| 82086671     | Granted | 6654308       | 12/23/2002  | 11/25/2003 | 10/326779          | US | Programmable Data Center                                                                                                                                                |
| 82086674     | Granted | 7263192       | 3/20/2002   | 8/28/2007  | 10/103020          | US | MEMORY HAVING MULTIPLE WRITE PORTS AND MULTIPLE CONTROL MEMORY UNITS, AND METHOD OF OPERATION                                                                           |
| 82088357     | Granted | 6793507       | 12/13/2002  | 9/21/2004  | 10/318067          | US | Establishing An Encrypted Session                                                                                                                                       |
| 82092668     | Granted | 6789610       | 8/28/2003   | 9/14/2004  | 10/651129          | US | Cable Connector Riser                                                                                                                                                   |
|              |         |               |             |            |                    |    | High Performance Cooling Device With Vapor Chamber                                                                                                                      |

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| 82095725     | Granted | 6694759       | 1/27/2003   | 2/24/2004  | 10/351427          | US | PRESSURE CONTROL OF COOLING FLUID WITHIN A PLENUM                                                                                                            |
| 82096223     | Granted | 7607136       | 10/28/2003  | 10/20/2009 | 10/695461          | US | USING AUTOMATICALLY ADJUSTABLE VENTS                                                                                                                         |
| 82100351     | Granted | 7200778       | 3/28/2003   | 4/3/2007   | 10/402122          | US | Method And Apparatus For Interfacing With A Distributed Computing Service                                                                                    |
| 82100471     | Granted | 6946877       | 12/12/2003  | 38615      | 10/735415          | US | System And Method For Verifying HDL Events For Observability                                                                                                 |
| 82100537     | Granted | 6954706       | 8/20/2003   | 10/11/2005 | 10/644376          | US | Circuit And Associated Methodology                                                                                                                           |
| 82100846     | Granted | 6866540       | 4/18/2003   | 38426      | 10/418924          | US | METHOD FOR MEASURING INTEGRATED CIRCUIT PROCESSOR POWER DEMAND AND ASSOCIATED SYSTEM                                                                         |
| 82104152     | Granted | 6802680       | 1/20/2004   | 38272      | 10/760737          | US | INDICIA-EQUIPPED ACTUATOR ASSEMBLY                                                                                                                           |
| 82105283     | Granted | 6868899       | 8/25/2003   | 38433      | 10/649519          | US | Torque Limiting Fastener                                                                                                                                     |
| 82105526     | Granted | 7565361       | 4/12/2005   | 7/21/2009  | 11/103567          | US | Variable Height Thermal Interface                                                                                                                            |
| 82106963     | Granted | 7305497       | 5/24/2004   | 12/4/2007  | 10/852984          | US | Method And System For Lexical Mapping Between Documents Sets Having A Common Topic                                                                           |
| 82110461     | Granted | 6728958       | 7/31/1998   | 4/27/2004  | 09/127659          | US | PERFORMING RESOURCE ANALYSIS ON ONE OR MORE CARDS OF A COMPUTER SYSTEM WHEREIN A PLURALITY OF SEVERITY LEVELS ARE ASSIGNED BASED ON A PREDETERMINED CRITERIA |
| 82110584     | Granted | 6082695       | 8/14/1998   | 36711      | 09/134745          | US | VOLATILE RESOURCE MANAGER WITH PRE-PREPARE NOTIFICATION                                                                                                      |
| 82117205     | Granted | 6710675       | 10/3/2001   | 3/23/2004  | 09/970550          | US | MOUNTING APPARATUS                                                                                                                                           |
| 82117700     | Granted | 6625730       | 3/31/2000   | 9/23/2003  | 09/540812          | US | TRANSMISSION LINE PARASITIC ELEMENT DISCONTINUITY CANCELLATION                                                                                               |
| 82118078     | Granted | 6681295       | 8/31/2000   | 1/20/2004  | 09/652451          | US | A SYSTEM FOR VALIDATING A BIOS PROGRAM AND MEMORY COUPLED THEREWITH BY USING A BOOT BLOCK PROGRAM HAVING A VALIDATION TOUTINE                                |
| 82118330     | Granted | 6671652       | 12/26/2001  | 12/30/2003 | 10/036889          | US | FAST LANE PREFETCHING                                                                                                                                        |
| 82118639     | Granted | 6774904       | 1/4/2002    | 8/10/2004  | 10/037984          | US | CLOCK SKEW MEASUREMENT CIRCUIT ON A MICROPROCESSOR DIE                                                                                                       |
| 82119635     | Granted | 7240106       | 4/25/2001   | 7/3/2007   | 09/842572          | US | Operating System Independent Method And Apparatus For Graphical Remote Access Having Improved Latency                                                        |
| 82120136     | Granted | 6792429       | 12/19/2001  | 9/14/2004  | 10/027407          | US | System And Method For Remote Discovery And Configuration Of A Network Device                                                                                 |
| 82120262     | Granted | 6650537       | 10/31/2001  | 11/18/2003 | 09/999575          | US | METHOD FOR FAULT TOLERANT MODIFICATION OF DATA REPRESENTATION IN A LARGE DATABASE                                                                            |
| 82120388     | Granted | 6832286       | 6/25/2002   | 12/14/2004 | 10/179081          | US | Low Profile DC Distribution Module For A Power Supply Unit                                                                                                   |
| 82120577     | Granted | 6666340       | 12/18/2001  | 12/23/2003 | 10/029767          | US | Memory Auto-Precharge                                                                                                                                        |
|              |         |               |             |            |                    |    | UNIVERSAL RACK RAIL                                                                                                                                          |

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| 82120760     | Granted | 7089188       | 3/27/2002   | 8/8/2006   | 10/108534          | US | METHOD TO EXPAND INPUTS FOR WORD OR DOCUMENT SEARCHING                                                                                                                           |
| 82121699     | Granted | 6898060       | 5/27/2003   | 5/24/2005  | 10/445617          | US | Gated Diode Overvoltage Protection                                                                                                                                               |
| 82122008     | Granted | 7051175       | 1/17/2003   | 5/23/2006  | 10/346793          | US | Techniques For Improved Transaction Processing                                                                                                                                   |
| 82128002     | Granted | 6205507       | 6/13/1996   | 3/20/2001  | 08/662480          | US | MEMORY COHERENCY IN A PROCESSOR-TO-BUS CYCLE IN A MULTI-PROCESSOR SYSTEM                                                                                                         |
| 82128380     | Granted | 6055590       | 6/5/1996    | 4/25/2000  | 08/658533          | US | BRIDGE CIRCUIT COMPRISING INDEPENDENT TRANSACTION BUFFERS WITH CONTROL LOGIC ADAPTED TO STORE OVERFLOW DATA IN SECOND BUFFER WHEN TRANSACTION SIZE EXCEEDS THE FIRST BUFFER SIZE |
| 82128881     | Granted | 5987546       | 4/21/1998   | 11/16/1999 | 09/063707          | US | MULTIPLE LONG BUS ARCHITECTURE HAVING A NON-TERMINAL TERMINATION ARRANGEMENT                                                                                                     |
| 82128938     | Granted | 6041377       | 2/2/1999    | 3/21/2000  | 09/243235          | US | METHOD AND APPARATUS FOR DISTRIBUTING INTERRUPTS IN A SCALABLE SYMMETRIC MULTIPROCESSOR SYSTEM WITHOUT CHANGING THE BUS WIDTH OR BUS PROTOCOL                                    |
| 82129940     | Granted | 5887163       | 4/4/1997    | 3/23/1999  | 08/834495          | US | METHOD AND APPARATUS FOR PROVIDING DUAL BOOTING CAPABILITIES TO A COMPUTER SYSTEM                                                                                                |
| 82130873     | Granted | 6018810       | 12/12/1997  | 1/25/2000  | 08/989450          | US | FAULT-TOLERANT INTERCONNECTION MEANS IN A COMPUTER SYSTEM                                                                                                                        |
| 82131686     | Granted | 6725226       | 6/18/2001   | 4/20/2004  | 09/883631          | US | COMPUTER SYSTEM USING A QUEUING SYSTEM AND METHOD FOR MANAGING A QUEUE AND HETEROGENEOUS DATA STRUCTURES                                                                         |
| 82133123     | Granted | 6738857       | 9/9/2002    | 5/18/2004  | 10/237422          | US | COMBINED SINGLE-ENDED/DIFFERENTIAL DATA BUS CONNECTOR                                                                                                                            |
| 82133315     | Granted | 6647415       | 9/30/1999   | 11/11/2003 | 09/409485          | US | DISK STORAGE WITH TRANSPARENT OVERFLOW TO NETWORK STORAGE                                                                                                                        |
| 82133435     | Granted | 6886109       | 5/18/2001   | 4/26/2005  | 09/860266          | US | Method And Apparatus For Expediting System Initialization                                                                                                                        |
| 82133810     | Granted | 6886065       | 9/29/2001   | 4/26/2005  | 09/967613          | US | Improving Signal Integrity In Differential Signal Systems                                                                                                                        |
| 82133873     | Granted | 5835297       | 12/31/1996  | 11/10/1998 | 08/778389          | US | DETECTING DISKETTE INSERTION                                                                                                                                                     |
| 82134749     | Granted | 5991760       | 6/26/1997   | 11/23/1999 | 08/883240          | US | METHOD AND APPARATUS FOR MODIFYING COPIES OF REMOTELY STORED DOCUMENTS USING A WEB BROWSER                                                                                       |
| 82134869     | Granted | 5892973       | 11/15/1996  | 4/6/1999   | 08/751536          | US | SYSTEM AND METHOD FOR DETERMINING ATTRIBUTES AND COUPLING CHARACTERISTICS OF COMPONENTS BY COMPARATIVELY OBSERVING PROVIDED REFERENCE SIGNAL                                     |
| 82136057     | Granted | 5943492       | 12/5/1997   | 8/24/1999  | 08/985597          | US | APPARATUS AND METHOD FOR GENERATING EXTERNAL INTERFACE SIGNALS IN A MICROPROCESSOR                                                                                               |
| 82136309     | Granted | 6076176       | 3/19/1998   | 6/13/2000  | 09/044275          | US | ENCODING OF FAILING BIT ADDRESSES TO FACILITATE MULTI-BIT FAILURE DETECT USING A WIRED-OR SCHEME                                                                                 |

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| 82136558     | Granted | 6226734       | 6/10/1998   | 5/1/2001   | 09/090027          | US | METHOD AND APPARATUS FOR PROCESSOR MIGRATION FROM DIFFERENT PROCESSOR STATES IN A MULTI-PROCESSOR COMPUTER SYSTEM   |
| 82136681     | Granted | 7093105       | 2/13/2004   | 8/15/2006  | 10/779503          | US | METHOD AND APPARATUS FOR DETERMINING AVAILABILITY OF A QUEUE TO WHICH A PROGRAM STEP IS ISSUED OUT-OF-PROGRAM ORDER |
| 82136930     | Granted | 6665304       | 12/31/1998  | 12/16/2003 | 09/224372          | US | METHOD AND APPARATUS FOR PROVIDING AN INTEGRATED CLUSTER ALIAS ADDRESS                                              |
| 82164152     | Granted | 5781201       | 5/1/1996    | 7/14/1998  | 08/642149          | US | METHOD FOR PROVIDING IMPROVED GRAPHICS PERFORMANCE THROUGH ATYPICAL PIXEL STORAGE IN VIDEO MEMORY                   |
| 82164155     | Granted | 5664221       | 11/14/1995  | 9/2/1997   | 08/557473          | US | A SYSTEM FOR RECONFIGURING ADDRESSES OF SCSI DEVICES VIA A DEVICE ADDRESS BUS INDEPENDENT OF THE SCSI BUS           |
| 82164464     | Granted | 5659739       | 10/2/1995   | 8/19/1997  | 08/538113          | US | SKIP LIST DATA STRUCTURE ENHANCEMENTS                                                                               |
| 82164530     | Granted | 5897400       | 6/30/1997   | 4/27/1999  | 08/884986          | US | TOWER BUILDING BLOCK SYSTEM                                                                                         |
| 82165088     | Granted | 6101276       | 6/21/1996   | 8/8/2000   | 08/670199          | US | METHOD AND APPARATUS FOR PERFORMING TWO PASS QUALITY VIDEO COMPRESSION THROUGH PIPELINING AND BUFFER MANAGEMENT     |
| 82165091     | Granted | 6760478       | 7/10/2000   | 7/6/2004   | 09/613359          | US | METHOD AND APPARATUS FOR PERFORMING QUALITY VIDEO COMPRESSION AND MOTION ESTIMATION                                 |
| 82165154     | Granted | 5966292       | 6/30/1997   | 10/12/1999 | 08/884938          | US | POWER BUS SYSTEM IN A TOWER BUILDING BLOCK SYSTEM                                                                   |
| 82165460     | Granted | 5835961       | 5/3/1996    | 11/10/1998 | 08/642730          | US | SYSTEM FOR NON-CURRENT PAGE TABLE STRUCTURE ACCESS                                                                  |
| 82165526     | Granted | 6046984       | 4/11/1997   | 4/4/2000   | 08/827868          | US | PRUNING OF SHORT PATHS IN STATIC TIMING VERIFIER                                                                    |
| 82166336     | Granted | 6664883       | 6/11/2002   | 12/16/2003 | 10/167944          | US | APPARATUS AND METHOD FOR PCB WINDING PLANAR MAGNETIC DEVICES                                                        |
| 82167335     | Granted | 6614764       | 2/1/2000    | 9/2/2003   | 09/496294          | US | BRIDGED NETWORK TOPOLOGY ACQUISITION                                                                                |
| 82168961     | Granted | 7165187       | 6/6/2003    | 1/16/2007  | 10/456863          | US | Batch based distributed data redundancy                                                                             |
| 82169768     | Granted | 8046279       | 1/14/2004   | 10/25/2011 | 10/757323          | US | System And Method For Comparing Results Of Multiple Lot Auctions Using Different Sequencing Rules                   |
| 82170770     | Granted | 7608194       | 7/6/2007    | 10/27/2009 | 11/774397          | US | Photonic Structures, Devices, And Methods                                                                           |
| 82174016     | Granted | 7200734       | 7/31/2004   | 4/3/2007   | 10/909786          | US | Operating-system-transparent Distributed Memory                                                                     |
| 82178510     | Granted | 7228460       | 1/23/2004   | 6/5/2007   | 10/764198          | US | MULTI-STATE STATUS REPORTING FOR HIGH-AVAILABILITY CLUSTER NODES                                                    |
| 82179887     | Granted | 7571163       | 7/13/2004   | 8/4/2009   | 10/890965          | US | Method For Sorting A Data Structure                                                                                 |
| 82181945     | Granted | 7376794       | 1/13/2004   | 5/20/2008  | 10/756636          | US | Coherent Signal In A Multi-processor System                                                                         |
| 82181948     | Granted | 7406565       | 1/13/2004   | 7/29/2008  | 10/756637          | US | Multi-processor Systems And Methods For Backup For Non-coherent Speculative Fills                                   |

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| 82182317     | Granted | 7330940       | 2/2/2005    | 2/12/2008  | 11/049024          | US | Method And System For Cache Utilization By Limiting Prefetch Requests                                                                        |
| 82187813     | Granted | 7416128       | 3/22/2005   | 8/26/2008  | 11/086123          | US | Methods And Systems For Determining The Position Of A Hand-held Object From The Acceleration Of The Hand-held Object                         |
| 82190372     | Granted | 7275183       | 4/30/2004   | 9/25/2007  | 10/836538          | US | Method Of Restoring Processes Within Process Domain                                                                                          |
| 82191311     | Granted | 7779257       | 12/6/2005   | 8/17/2010  | 11/294604          | US | SYSTEM AND METHOD FOR CONSTRAINT RESOLUTION                                                                                                  |
| 82192001     | Granted | 7748005       | 9/10/2004   | 6/29/2010  | 10/938961          | US | System And Method For Allocating A Plurality Of Resources Between A Plurality Of Computing Domains                                           |
| 82196303     | Granted | 7275122       | 4/28/2005   | 9/25/2007  | 11/117881          | US | Method And System For Maintaining A Desired Service Level For A Processor Receiving Excessive Interrupts                                     |
| 82197428     | Granted | 7440226       | 10/14/2005  | 10/21/2008 | 11/250657          | US | Cartridge Loading Devices                                                                                                                    |
| 82200926     | Granted | 7995339       | 11/1/2004   | 8/9/2011   | 10/976786          | US | Control Of Vent Tiles Correlated With A Rack                                                                                                 |
| 82205042     | Granted | 7480424       | 9/19/2005   | 1/20/2009  | 11/230159          | US | Method And Apparatus For Modifying An Electromagnetic Radiation Beam                                                                         |
| 82206731     | Granted | 7394587       | 1/28/2005   | 7/1/2008   | 11/046587          | US | APPARATUS HAVING A PHOTONIC CRYSTAL                                                                                                          |
| 82206854     | Granted | 7409524       | 8/17/2005   | 8/5/2008   | 11/205622          | US | System And Method For Responding To TLB Misses                                                                                               |
| 82208732     | Granted | 7495552       | 4/15/2005   | 2/24/2009  | 11/107127          | US | Prescription-customized Medical Hardware                                                                                                     |
| 82210976     | Granted | 7651871       | 11/30/2005  | 1/26/2010  | 11/290879          | US | Device For Forming Magnetic Well For Nanoparticles                                                                                           |
| 82212287     | Granted | 7558724       | 4/19/2005   | 7/7/2009   | 11/109172          | US | Operation Region Describing A Virtual Device                                                                                                 |
| 82214096     | Granted | 7472292       | 10/3/2005   | 12/30/2008 | 11/242686          | US | System And Method For Throttling Memory Power Consumption Based On Status Of Cover Switch Of A Computer System                               |
| 82216532     | Granted | 7652911       | 12/10/2008  | 1/26/2010  | 12/331642          | US | Nanoscale Shift Register And Signal Demultiplexing Using Microscale/nanoscale Shift Registers                                                |
| 82220339     | Granted | 8390086       | 7/19/2010   | 3/5/2013   | 12/815590          | US | A SOLAR CELL EMPLOYING A NANOWIRE                                                                                                            |
| 82232705     | Granted | 6810494       | 2/24/2003   | 10/26/2004 | 10/372600          | US | SOFTWARE SYSTEM AND METHODS FOR TESTING TRANSACTIONAL SERVERS                                                                                |
| 82240946     | Granted | 7567097       | 9/29/2007   | 7/28/2009  | 11/906010          | US | PRE-DRIVER CIRCUIT AND APPARATUS USING SAME                                                                                                  |
| 82252055     | Granted | 6721752       | 10/31/1997  | 4/13/2004  | 08/962428          | US | Computer-Based System and Method for Inferring a Four-Digit Calendar Year from a Date Expressed in a Format Having a Two-Digit Calendar Year |
| 82252616     | Granted | 5790780       | 7/16/1996   | 8/4/1998   | 08/682974          | US | Analysis Of Failures In A Computing Environment                                                                                              |
| 82253120     | Granted | 6687873       | 3/9/2000    | 2/3/2004   | 09/522056          | US | METHOD AND SYSTEM FOR REPORTING XML DATA FROM A LEGACY COMPUTER SYSTEM                                                                       |
| 82254614     | Granted | 7469285       | 6/1/2007    | 12/23/2008 | 11/757209          | US | Generation Of Computer Resource Utilization Data Per Computer Application                                                                    |
| 82254743     | Granted | 6721652       | 11/22/2002  | 4/13/2004  | 10/301994          | US | IMPLEMENTING GEO-FENCING ON MOBILE DEVICES                                                                                                   |
| 82261421     | Granted | 8109151       | 1/26/2010   | 2/7/2012   | 12/694260          | US | FLOW SENSING SYSTEMS AND METHODS                                                                                                             |
| 82265918     | Granted | 5793994       | 1/31/1996   | 8/11/1998  | 08/594868          | US | Synchronous Event Posting By A High Throughput Bus                                                                                           |

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|--------------|---------|---------------|-------------|------------|--------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| 82266041     | Granted | 5649189       | 11/29/1995  | 7/15/1997  | 08/564630          | US | Method and apparatus for single pass data encoding of words using a stack for writing in reverse order                           |
| 82266914     | Granted | 5907566       | 5/29/1997   | 5/25/1999  | 08/865246          | US | Continuous Byte-Stream Encoder/decoder Using Frequency Increase and Cyclic Redundancy Check                                      |
| 82267475     | Granted | 6188669       | 6/17/1997   | 2/13/2001  | 08/877531          | US | Apparatus For Statistical Multiplexing And Flow Control Digital Subscriber Loop Modems                                           |
| 82268228     | Granted | 6115379       | 9/11/1997   | 9/5/2000   | 08/927914          | US | UNICAST, MULTICAST, AND BROADCAST METHOD AND APPARATUS                                                                           |
| 82268600     | Granted | 6662135       | 12/9/1998   | 12/9/2003  | 09/207781          | US | Method And Apparatus For Reflective Mixer Testing Of A Cable Modem                                                               |
| 82268729     | Granted | 6331987       | 5/27/1998   | 12/18/2001 | 09/085586          | US | METHOD AND SYSTEM FOR BUNDLING DATA IN A DATA-OVER-CABLE SYSTEM                                                                  |
| 82268852     | Granted | 6201792       | 5/14/1998   | 3/13/2001  | 09/079003          | US | BACKPRESSURE RESPONSIVE MULTICAST QUEUE                                                                                          |
| 82268915     | Granted | 6697862       | 5/21/1999   | 2/24/2004  | 09/316488          | US | SYSTEM AND METHOD FOR NETWORK ADDRESS MAINTENANCE USING DYNAMIC HOST CONFIGURATION PROTOCOL MESSAGES IN A DATA-OVER-CABLE SYSTEM |
| 82269410     | Granted | 6674745       | 12/31/1998  | 1/6/2004   | 09/223856          | US | Method and System for Mapping Phone Numbers to IP Addresses                                                                      |
| 82269662     | Granted | 6728309       | 1/14/2000   | 4/27/2004  | 09/483440          | US | METHOD AND APPARATUS FOR HIGH SPEED DATA TRANSMISSION OVER A FOUR-WIRE SUBSCRIBER LINE.                                          |
| 82269665     | Granted | 6700871       | 5/4/1999    | 3/2/2004   | 09/305133          | US | Increased Throughput Across Data Network Interface by Dropping Redundant Packets                                                 |
| 82269851     | Granted | 6704325       | 4/6/1999    | 3/9/2004   | 09/287229          | US | Method To Recognize Streaming Memory Aligned And Non-Memory Aligned Data Patterns With Optimal Hardware Reuse                    |
| 82270658     | Granted | 6829239       | 5/9/2003    | 12/7/2004  | 10/434898          | US | APPARATUS AND METHODS FOR DETERMINING THE CORRECT WORKSTATION WITHIN A LAN FOR A LAN MODEM TO ROUTE A PACKET                     |
| 82270850     | Granted | 6633542       | 12/29/1999  | 10/14/2003 | 09/474686          | US | Method Of Establishing A Flow In An ATM Based MPOA Network                                                                       |
| 82271033     | Granted | 6665362       | 9/14/2000   | 12/16/2003 | 09/660976          | US | Digital Receive Phase Lock Loop With Phase-Directed Sample Selection                                                             |
| 82271039     | Granted | 6633628       | 1/5/2001    | 10/14/2003 | 09/755765          | US | Apparatus and Method for Selecting A Supported Signal Path For A Transceiver                                                     |
| 82271411     | Granted | 6622018       | 4/24/2000   | 9/16/2003  | 09/558413          | US | Portable Device Control Console With Wireless Connection                                                                         |
| 82271537     | Granted | 6763061       | 7/31/2000   | 7/13/2004  | 09/628842          | US | FREQUENCY DOMAIN TECHNIQUE FOR NARROWBAND NOISE CANCELLATION IN DMT RECEIVERS                                                    |
| 82271597     | Granted | 6665275       | 12/3/1999   | 12/16/2003 | 09/453720          | US | Network Device Including Automatic Detection Of Duplex Mismatch                                                                  |

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| 82271789     | Granted   | 6788782       | 1/20/2000   | 9/7/2004   | 09/488340          | US | Method and Apparatus for Switching Between Multiple Communication Lines                                          |
| 82271909     | Granted   | 6865673       | 3/21/2000   | 3/8/2005   | 09/532050          | US | METHOD FOR SECURE INSTALLATION OF DEVICE IN PACKET-BASED COMMUNICATION NETWORK                                   |
| 82272224     | Granted   | 7359326       | 2/5/2003    | 4/15/2008  | 10/358872          | US | METHOD FOR SPLITTING DATA AND ACKNOWLEDGEMENTS IN A TCP SESSION                                                  |
| 82272470     | Granted   | 6697464       | 9/19/2000   | 2/24/2004  | 09/665531          | US | System and Method For Interfacing A Modem's Digital Interface To A PBX Telephone                                 |
| 82272536     | Granted   | 6862286       | 5/8/2000    | 3/1/2005   | 09/566563          | US | Tracking Dynamic Addresses on a Network                                                                          |
| 82273100     | Granted   | 6735297       | 1/12/2001   | 5/11/2004  | 09/760520          | US | SYSTEM FOR MAINTAINING PBX LICENSE KEY INFORMATION IN THE EVENT OF A HARDWARE FAILURE REDUCING MTTR              |
| 82273160     | Granted   | 6839360       | 2/20/2001   | 1/4/2005   | 09/785271          | US | FIFO Storage Including Pointer Misalignment Detection                                                            |
| 82273349     | Granted   | 6718493       | 5/17/2001   | 4/6/2004   | 09/859867          | US | Method and Apparatus for Selection of ARQ Parameters and Estimation of Improved Communications                   |
| 82275344     | Granted   | 5864681       | 8/9/1996    | 1/26/1999  | 08/689456          | US | VIDEO ENCODER/DECODER SYSTEM                                                                                     |
| 82948295     | Granted   | 6792419       | 10/30/2000  | 9/14/2004  | 09/703538          | US | SYSTEM AND METHOD FOR RANKING HYPERLINKED DOCUMENTS BASED ON A STOCHASTIC BACKOFF PROCESSES                      |
| 82002767     | Granted   | 6708260       | 3/14/2002   | 3/16/2004  | 10/098049          | US | Managing Data In A Queue                                                                                         |
| 82116392     | Granted   | 5889957       | 6/7/1995    | 3/30/1999  | 08/472227          | US | METHOD AND APPARATUS FOR CONTEXT SENSITIVE PATHSEND                                                              |
| 81989783     | Published |               | 10/19/2006  |            | 11/583504          | US | Autobiographical And Other Data Collection System                                                                |
| 81997523     | Granted   | 7493280       | 7/10/2001   | 2/17/2009  | 09/902928          | US | Method And System For Setting An Optimal Reserve Price For An Auction                                            |
| 81998210     | Granted   | 7536338       | 9/10/2001   | 5/19/2009  | 09/955264          | US | METHOD AND SYSTEM FOR AUTOMATED BID ADVICE FOR AUCTIONS                                                          |
| 82004141     | Granted   | 7046247       | 5/15/2002   | 5/16/2006  | 10/146974          | US | METHOD FOR VISUALIZING GRAPHICAL DATA SETS HAVING A NON-UNIFORM GRAPHICAL DENSITY FOR DISPLAY                    |
| 82020251     | Granted   | 6003079       | 2/27/1997   | 12/14/1999 | 08/807073          | US | SYSTEM AND METHOD FOR CONTINUOUSLY MEASURING QUALITY OF SERVICE IN A FEDERATED APPLICATION ENVIRONMENT           |
| 82040534     | Granted   | 6189033       | 7/16/1998   | 2/13/2001  | 09/116716          | US | METHOD AND SYSTEM FOR PROVIDING PERFORMANCE GUARANTEES FOR A DATA SERVICE SYSTEM OF A DATA ACCESS NETWORK SYSTEM |
| 82046531     | Granted   | 8200837       | 4/26/1999   | 6/12/2012  | 09/299684          | US | METHOD AND SYSTEM FOR MAINTAINING A CONTENT SERVER AT SAFE LOAD CONDITIONS                                       |
| 82050026     | Granted   | 7181678       | 1/29/2004   | 2/20/2007  | 10/767151          | US | Document Clustering Method And System                                                                            |
| 82058708     | Granted   | 7069434       | 6/13/2000   | 6/27/2006  | 09/592322          | US | Secure Data Transfer Method And System                                                                           |
| 82059020     | Granted   | 6584433       | 10/4/2000   | 6/24/2003  | 09/684719          | US | Harmonic Average Based Clustering Method And System                                                              |

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| 82084676     | Granted     | 7150014       | 10/4/2002   | 12/12/2006 | 10/264468          | US | AUTOMATICALLY DEPLOYING SOFTWARE PACKAGES USING<br>COMPUTER SYSTEMS                                                                                        |
| 82099352     | Published   |               | 10/30/2003  |            | 10/699359          | US | Method And Apparatus For Representing Data Available A<br>Peer-to-peer Network Using Bloom-filters                                                         |
| 82171643     | Granted     | 7640217       | 4/8/2004    | 12/29/2009 | 10/822066          | US | Identifying Exceptional Managed Systems                                                                                                                    |
| 82172204     | Granted     | 8214461       | 11/23/2004  | 7/3/2012   | 10/999639          | US | Method Of Processing Request By Server Computer System                                                                                                     |
| 82173455     | Granted     | 7539690       | 10/27/2003  | 5/26/2009  | 10/694367          | US | Data Mining Method And System Using Regression Cluster                                                                                                     |
| 82173518     | Granted     | 7027950       | 11/19/2003  | 4/11/2006  | 10/716855          | US | Regression Clustering And Classification                                                                                                                   |
| 82188563     | Granted     | 7593903       | 12/3/2004   | 9/22/2009  | 11/004317          | US | METHOD AND MEDIUM FOR FEATURE SELECTION OF<br>PARTIALLY LABELED DATA                                                                                       |
| 82188998     | Application |               | 12/16/2004  |            | 11/013142          | US | Automatically Determining A System Workflow                                                                                                                |
| 82190933     | Granted     | 7269689       | 6/17/2004   | 9/11/2007  | 10/870783          | US | System And Method For Sharing Storage Resources Between<br>Multiple Files                                                                                  |
| 82197242     | Allowed     |               | 4/28/2006   |            | 11/414481          | US | Method And System For Data Retention                                                                                                                       |
| 82197245     | Granted     | 7428486       | 1/31/2005   | 9/23/2008  | 11/047163          | US | SYSTEM AND METHOD FOR GENERATING PROCESS<br>SIMULATION PARAMETERS                                                                                          |
| 82200299     | Granted     | 7363306       | 1/27/2005   | 4/22/2008  | 11/045563          | US | METHOD AND SYSTEM FOR GRAPHICAL REPRESENTATION                                                                                                             |
| 82208918     | Granted     | 9047290       | 4/29/2005   | 6/2/2015   | 11/118786          | US | Computing A Quantification Measure Associated With Cases<br>In A Category                                                                                  |
| 82212722     | Granted     | 9021094       | 4/28/2005   | 4/28/2015  | 11/116728          | US | Allocation Of Resources For Tiers Of Multi-tiered System<br>Based On Selecting Items From Respective Sets                                                  |
| 82213970     | Granted     | 7797282       | 9/29/2005   | 9/14/2010  | 11/241082          | US | System And Method For Modifying A Training Set                                                                                                             |
| 82213976     | Granted     | 9152475       | 9/29/2005   | 10/6/2015  | 11/239719          | US | Notifying Listeners Of Change Events                                                                                                                       |
| 82220342     | Granted     | 7558766       | 9/29/2006   | 7/7/2009   | 11/536643          | US | Classification Using Enhanced Feature Sets                                                                                                                 |
| 82225025     | Granted     | 8021163       | 10/31/2006  | 9/20/2011  | 11/555001          | US | Skill-set Identification                                                                                                                                   |
| 82226150     | Granted     | 8963969       | 1/31/2007   | 2/24/2015  | 11/700429          | US | Providing An Automated Visualization Of A Collection Of Data<br>Values Divided Into A Number Of Bins Depending Upon A<br>Change Feature Of The Data Values |
| 82229141     | Granted     | 7760203       | 4/30/2007   | 7/20/2010  | 11/742512          | US | GRAPHIC COLOR-PIXEL-BASED VISUAL-ANALYTIC<br>REPRESENTATIONS FOR DATASETS                                                                                  |
| 82238699     | Published   |               | 9/30/2008   |            | 12/242646          | US | System and Method for Future Period Forecasting                                                                                                            |
| 82239569     | Published   |               | 11/8/2007   |            | 12/741204          | US | Navigational Ranking For Focused Crawling                                                                                                                  |
| 82240070     | Granted     | 8688723       | 9/30/2008   | 4/1/2014   | 12/241305          | US | Methods And Apparatus Using Range Queries For Multi-<br>dimensional Data In A Database                                                                     |
| 82242758     | Granted     | 8627330       | 10/22/2008  | 1/7/2014   | 12/256361          | US | Managing A Workload In A Database                                                                                                                          |
| 82248245     | Granted     | 8489633       | 3/6/2009    | 7/16/2013  | 12/399843          | US | Correlated Query Process (CQP) And Peer-to-peer (P2P)<br>Execution                                                                                         |
| 82248308     | Published   |               | 3/10/2009   |            | 12/401503          | US | Progress Analyzer For Database Queries                                                                                                                     |
| 82248311     | Granted     | 8572039       | 11/30/2009  | 10/29/2013 | 12/627935          | US | Focused Backup Scanning                                                                                                                                    |

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| 82248497     | Granted   | 9043353       | 10/14/2008  | 5/26/2015  | 12/251220 US       | US | QUERY STREAM EXECUTION USING PRIORITY GRADIENT MULTIPROGRAMMING                                                      |
| 82248500     | Granted   | 8365174       | 10/14/2008  | 1/29/2013  | 12/251272 US       | US | MIXED WORKLOAD SCHEDULER                                                                                             |
| 82248560     | Granted   | 8572068       | 2/2/2009    | 10/29/2013 | 12/364086 US       | US | Evaluation Of Set Of Representative Query Performance In Robustness Mapping                                          |
| 82248626     | Published |               | 2/2/2009    |            | 12/364170 US       | US | Database System Testing Using Robustness Maps                                                                        |
| 82250810     | Granted   | 8176080       | 3/6/2009    | 5/8/2012   | 12/399675 US       | US | Densensitizing Character Strings                                                                                     |
| 82258112     | Allowed   |               | 8/10/2009   |            | 12/538405 US       | US | Method And System For Characterizing Web Content                                                                     |
| 82258175     | Granted   | 8185535       | 10/30/2009  | 5/22/2012  | 12/609327 US       | US | Methods And Systems For Determining Unknowns In Collaborative Filtering                                              |
| 82259609     | Published |               | 1/13/2010   |            | 12/686615 US       | US | Data Value Replacement In A Database                                                                                 |
| 82260857     | Published |               | 4/27/2010   |            | 12/768088 US       | US | COLUMN ORIENTED STORAGE IN A ROW ORIENTED DATABASE MANAGEMENT SYSTEM                                                 |
| 82261049     | Granted   | 8719007       | 9/27/2010   | 5/6/2014   | 12/891150 US       | US | Determining Offer Terms From Text                                                                                    |
| 82262045     | Granted   | 8799310       | 7/23/2010   | 8/5/2014   | 12/842434 US       | US | Method And System For Processing A Uniform Resource Locator                                                          |
| 82262543     | Published |               | 7/13/2010   |            | 12/835044 US       | US | Generating Machine-understandable Representations Of Content                                                         |
| 82263608     | Granted   | 9158815       | 10/19/2010  | 10/13/2015 | 12/907325 US       | US | ESTIMATE A NUMBER A UNIQUE VALUES IN A LIST                                                                          |
| 82264604     | Granted   | 8620985       | 10/14/2010  | 12/31/2013 | 12/904829 US       | US | METHOD, SYSTEM, AND PRODUCT FOR PERFORMING UNIFORMLY FINE-GRAIN DATA PARALLEL COMPUTING                              |
| 82265291     | Published |               | 1/14/2011   |            | 13/007487 US       | US | SYSTEMS AND METHODS OF BLOCK COMPUTATION                                                                             |
| 82275530     | Granted   | 8631017       | 12/16/2010  | 1/14/2014  | 12/970262 US       | US | Collaborative Filtering With Hashing                                                                                 |
| 82613056     | Published |               | 5/3/2011    |            | 13/100073 US       | US | Processing Notifications                                                                                             |
| 82617324     | Published |               | 7/8/2011    |            | 13/178994 US       | US | HASH JOIN AND HASH AGGREGATION INTEGRATION SYSTEM                                                                    |
| 82618452     | Published |               | 3/31/2011   |            | 13/077460 US       | US | Merge Optimization System                                                                                            |
| 82663149     | Granted   | 8917872       | 7/6/2011    | 12/23/2014 | 13/177228 US       | US | ENCRYPTION KEY STORAGE WITH KEY FRAGMENT STORES (as amended)                                                         |
| 82850130     | Published |               | 5/22/2012   |            | 13/477789 US       | US | TREE DATA STRUCTURE                                                                                                  |
| 82892257     | Published |               | 1/25/2012   |            | 13/357850 US       | US | DETERMINING WHETHER TO LAUNCH A PARTICULAR OFFERING                                                                  |
| 82892271     | Published |               | 3/8/2012    |            | 13/415814 US       | US | EVALUATING EMAIL INFORMATION AND AGGREGATING EVALUATION RESULTS                                                      |
| 82901929     | Published |               | 5/31/2012   |            | 13/484396 US       | US | SEARCHING BASED ON AN IDENTIFIER OF A SEARCHER                                                                       |
| 82929174     | Granted   | 9087143       | 3/30/2012   | 7/21/2015  | 13/435597 US       | US | OVERLAYING TRANSPARENCY IMAGES INCLUDING PIXELS CORRESPONDING TO DIFFERENT HEIRARCHICAL LEVELS OVER A GEOGRAPHIC MAP |
| 82944090     | Published |               | 2/10/2012   |            | 13/370938 US       | US | Presenting Streaming Media For An Event                                                                              |
| 82962988     | Published |               | 4/30/2012   |            | 13/460541 US       | US | Identifying News Events that Cause a Shift in Sentiment                                                              |

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| 82963111     | Published   |               | 4/26/2012   |            | 13/457444          | US | In-Database Parallel Analytics                                                                              |
| 82963529     | Published   |               | 6/21/2012   |            | 13/528972          | US | Tree-Based Regression                                                                                       |
| 83013831     | Published   |               | 7/31/2012   |            | 13/563198          | US | OPEN STATION CANONICAL OPERATOR FOR DATA STREAM PROCESSING                                                  |
| 83014412     | Granted     | 8924316       | 7/31/2012   | 12/30/2014 | 13/563690          | US | MULTICLASS CLASSIFICATION OF POINTS                                                                         |
| 83019112     | Allowed     |               | 6/1/2012    |            | 29/423605          | US | A COMPUTING DEVICE DISPLAYING A COMPUTER-GENERATED ICON REPRESENTING A COLLECTION OF RESOURCES (As Amended) |
| 83106288     | Published   |               | 11/14/2012  |            | 13/676957          | US | SUPPLIER QUANTITY SELECTION                                                                                 |
| 83108369     | Granted     | 9152679       | 1/31/2013   | 42283      | 13/755814          | US | DISPLAYING RECOMMENDED ENTITIES IN A RELEVANCE MAP                                                          |
| 83138840     | Published   |               | 1/31/2013   |            | 13/755633          | US | BUILDING A SEMANTICS GRAPH FOR AN ENTERPRISE COMMUNICATION NETWORK                                          |
| 83139109     | Published   |               | 1/31/2013   |            | 13/755051          | US | AMPLITUDE AND FREQUENCY-BASED DETERMINATION                                                                 |
| 83163022     | Published   |               | 7/22/2010   |            | 13/809683          | US | Context-based Item Bookmarking                                                                              |
| 83186617     | Granted     | D735732       | 3/12/2013   | 8/4/2015   | 29/448460          | US | Display Screen with Graphical User Interface (as amended)                                                   |
| 83199541     | Published   |               | 6/6/2013    |            | 13/912090          | US | Visual Analytics of Spatial Time Series Data Using A Pixel Calendar Tree                                    |
| 83200274     | Published   |               | 2/28/2013   |            | 13/779826          | US | OPTIMIZING AND MANAGING EXECUTION OF HYBRID FLOWS                                                           |
| 83204639     | Published   |               | 2/27/2013   |            | 13/778455          | US | Determining Explanatoriness of a Segment                                                                    |
| 83209674     | Published   |               | 4/30/2013   |            | 13/873889          | US | RESENDING MESSAGES                                                                                          |
| 83225973     | Published   |               | 10/19/2010  |            | 13/878481          | US | Managing Content From Structured And Unstructured Data Sources                                              |
| 83862634     | Application |               | 3/19/2014   |            | 14/219209          | US | User Defined Functions Including Requests for Analytics by External Analytic Engines                        |
| 83996545     | Published   |               | 4/27/2012   |            | 14/372712          | US | Similarity Score Lookup and Representation                                                                  |
| 84122559     | Published   |               | 6/29/2012   |            | 14/410005          | US | CAPACITY PLANNING SYSTEM                                                                                    |
| 84164202     | Application |               | 9/12/2012   |            | 14/421777          | US | METADATA TREE WITH KEY ROTATION INFORMATION                                                                 |
| 84208501     | Published   |               | 9/30/2012   |            | 14/432290          | US | ELECTRONIC HEALTH RECORD SYSTEM WITH CUSTOMIZABLE COMPLIANCE POLICIES                                       |
| 84237933     | Application |               | 10/31/2012  |            | 14/439832          | US | CASE MANAGEMENT USING ACTIVE ENTITIES IN A SOCIAL NETWORK                                                   |
| 84264445     | Application |               | 11/29/2012  |            | 14/647138          | US | IMAGE ANALYSIS                                                                                              |
| 82064201     | Granted     | 7634656       | 9/12/2002   | 40162      | 10/241894          | US | Method And Apparatus For Identifying A Voice Caller                                                         |
| 82065014     | Granted     | 6873270       | 10/30/2002  | 3/29/2005  | 10/283503          | US | Data Storage And Analysis                                                                                   |
| 82066013     | Granted     | 7076655       | 6/18/2002   | 38909      | 10/175183          | US | Multiple Trusted Computing Environments With Verifiable Environment Identities                              |



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| 82069010     | Granted     | 6978379       | 5/26/2000   | 12/20/2005 | 09/578503 US       | US | Configuring Computer Systems                                               |
| 82069631     | Granted     | 7302698       | 9/19/2000   | 11/27/2007 | 09/728827 US       | US | Operation Of Trusted State In Computing Platform                           |
| 82097291     | Granted     | 8230497       | 11/4/2002   | 7/24/2012  | 10/287125 US       | US | A Method Of Identifying Software Vulnerabilities On A Computer System      |
| 82101974     | Granted     | 8392995       | 1/11/2005   | 3/5/2013   | 11/033182 US       | US | Network Management                                                         |
| 82198556     | Granted     | 8379538       | 6/22/2005   | 2/19/2013  | 11/158756 US       | US | MODEL-DRIVEN MONITORING ARCHITECTURE                                       |
| 82203920     | Allowed     |               | 10/28/2005  |            | 11/718122 US       | US | Virtual Computing Infrastructure                                           |
| 82206668     | Granted     | 9083748       | 12/14/2005  | 7/14/2015  | 11/302637 US       | US | Modelling Network To Assess Security Properties                            |
| 82237013     | Published   |               | 10/16/2008  |            | 12/252395 US       | US | System And Method For Sizing Enterprise Application Systems                |
| 82242317     | Granted     | 8170214       | 10/1/2008   | 5/1/2012   | 12/286854 US       | US | OKD Transmitter And Transmission Method                                    |
| 82243193     | Allowed     |               | 10/15/2008  |            | 12/252053 US       | US | Capacity Planning Of Multi-tiered Applications From Application Logs       |
| 82276154     | Published   |               | 10/29/2010  |            | 12/916277 US       | US | METHOD AND SYSTEM FOR ANALYZING AN ENVIRONMENT                             |
| 82277090     | Granted     | 7143316       | 4/8/2003    | 39049      | 10/409239 US       | US | Fault Diagnosis In A Network                                               |
| 82577075     | Granted     | 8781334       | 10/26/2009  | 7/15/2014  | 13/319372 US       | US | Quantum Repeater And System And Method For Creating Extended Entanglements |
| 82820538     | Granted     | 8650637       | 8/24/2011   | 2/11/2014  | 13/217010 US       | US | NETWORK SECURITY RISK ASSESSMENT                                           |
| 82853044     | Allowed     |               | 10/26/2009  |            | 13/387111 US       | US | Method And Apparatus For Selectively Routing Entanglement Building         |
| 82891945     | Granted     | 9111229       | 10/26/2009  | 42234      | 13/378383 US       | US | Quantum Repeater And System And Method For Creating Extended Entanglements |
| 82901497     | Granted     | 9152640       | 5/10/2012   | 10/6/2015  | 13/468823 US       | US | DETERMINING FILE ALLOCATION BASED ON FILE OPERATIONS                       |
| 82934043     | Granted     | 8370610       | 2/24/2012   | 2/5/2013   | 13/405098 US       | US | Remote Configuration Of Computing Platforms                                |
| 83093244     | Granted     | 8990900       | 6/23/2010   | 3/24/2015  | 13/805160 US       | US | Authorization Control                                                      |
| 83138425     | Application |               | 1/31/2013   |            | 13/754974 US       | US | IDENTIFYING PARTICIPANTS FOR COLLABORATION IN A THREAT EXCHANGE COMMUNITY  |
| 83728691     | Application |               | 6/16/2011   |            | 14/118847 US       | US | System and Method for Policy Generation                                    |
| 83995343     | Published   |               | 4/30/2012   |            | 14/371709 US       | US | BLOCK LEVEL STORAGE                                                        |
| 84262401     | Application |               | 5/22/2015   |            | 14/719847 US       | US | SECURITY MODELLING FOR INFORMATION TECHNOLOGY SYSTEMS                      |
| 90022883     | Application |               | 2/28/2013   |            | 14/770261 US       | US | RESOURCE REFERENCE CLASSIFICATION                                          |
| 82133936     | Granted     | 7451388       | 9/8/1999    | 39763      | 09/392170 US       | US | RANKING SEARCH ENGINE RESULTS                                              |
| 82206671     | Granted     | 8781977       | 3/29/2005   | 41835      | 11/092247 US       | US | System And Method Of Pricing Resources                                     |
| 82250867     | Granted     | 8296253       | 6/15/2009   | 10/23/2012 | 12/484938 US       | US | Managing Online Content Based On Its Predicted Popularity                  |
| 82930651     | Granted     | 8819698       | 4/2/2012    | 8/26/2014  | 13/437703 US       | US | CROSS-PLATFORM WEB-BASED NATIVE DEVICE FEATURE ACCESS                      |

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| 83141127     | Application |               | 1/14/2013   |            | 29/443192          | US | DOCUMENT LOCATOR USER INTERFACE FOR PRESENTING DOCUMENTS                                                                      |
|              |             |               |             |            |                    |    | TO A USER BASED ON TOPICS AND COLLECTIVE OPINION EXPRESSED IN THE DOCUMENTS                                                   |
| 84027637     | Application |               | 9/16/2014   |            | 14/487976          | US | CONTROVERSY DETECTOR                                                                                                          |
| 81979793     | Granted     | 8069157       | 4/17/2001   | 11/29/2011 | 09/836952          | US | System And Method For Providing Context-aware Computer Management Using Smart Identification Badges                           |
| 82171142     | Granted     | 7945648       | 10/27/2003  | 40680      | 10/695259          | US | METHODS AND SYSTEMS FOR DYNAMICALLY CONFIGURING A NETWORK COMPONENT TO REROUTE MEDIA STREAMS                                  |
| 82186001     | Granted     | 7922919       | 10/3/2007   | 4/12/2011  | 11/906886          | US | Crossbar-array Designs And Wire Addressing Methods That Tolerate Misalignment Of Electrical Components At Wire Overlap Points |
| 82189436     | Granted     | 7358614       | 3/8/2005    | 39553      | 11/079763          | US | Antisymmetric Nanowire Crossbars                                                                                              |
| 82201925     | Granted     | 7405462       | 1/31/2006   | 39658      | 11/343304          | US | FPGA Architecture At Conventional And Submicron Scales                                                                        |
| 82216535     | Granted     | 7436209       | 10/30/2006  | 39735      | 11/590491          | US | Nanoscale Electronic Latch                                                                                                    |
| 82219595     | Granted     | 7517794       | 10/21/2005  | 4/14/2009  | 11/256513          | US | Method For Fabricating Nanoscale Features                                                                                     |
| 82240442     | Granted     | 7899091       | 10/15/2008  | 40603      | 12/288035          | US | Defect-tolerant Demultiplexers Based On Threshold Logic                                                                       |
| 82248875     | Granted     | 8081850       | 4/30/2009   | 40897      | 12/433850          | US | DEVICE WITH TUNABLE PLASMON RESONANCE                                                                                         |
| 82258361     | Granted     | 8283649       | 7/28/2009   | 41191      | 12/510753          | US | MEMRISTOR WITH A NON-PLANAR SUBSTRATE                                                                                         |
| 82260296     | Granted     | 8384401       | 3/31/2010   | 41331      | 12/751739          | US | Fast Time-tagged Event Detection Using Resistive Switching Devices                                                            |
| 82260359     | Granted     | 8111494       | 1/28/2010   | 2/7/2012   | 12/695995          | US | MEMRISTOR-PROTECTION INTEGRATED CIRCUIT AND METHOD FOR PROTECTION OF A MEMRISTOR DURING SWITCHING                             |
| 82261487     | Granted     | 8023307       | 4/30/2010   | 40806      | 12/771158          | US | PERIPHERAL SIGNAL HANDLING IN EXTENSIBLE THREE DIMENSIONAL CIRCUITS                                                           |
| 82261922     | Granted     | 8467253       | 5/24/2010   | 41443      | 12/786073          | US | READING MEMORY ELEMENTS WITHIN A CROSSBAR ARRAY                                                                               |
| 82262105     | Granted     | 8546785       | 3/31/2010   | 41548      | 12/751977          | US | MEMRISTIVE DEVICE                                                                                                             |
| 82262108     | Granted     | 8203171       | 4/5/2010    | 41079      | 12/754300          | US | DEFECTIVE GRAPHENE-BASED MEMRISTOR                                                                                            |
| 82263854     | Allowed     |               | 10/28/2010  |            | 12/914935          | US | MEMRISTIVE DEVICES WITH LAYERED JUNCTIONS AND METHODS FOR FABRICATING THE SAME                                                |
| 82678323     | Granted     | 8927346       | 12/31/2008  | 1/6/2015   | 13/121916          | US | Electrically And/or Thermally Actuated Device                                                                                 |
| 82747643     | Granted     | 8891283       | 1/5/2009    | 41961      | 13/130820          | US | Memristive Device Based On Current Modulation By Trapped Charges                                                              |
| 82756399     | Granted     | 8711594       | 8/18/2011   | 41758      | 13/212428          | US | Asymmetric Switching Rectifier                                                                                                |
| 82775051     | Granted     | 8830727       | 10/21/2011  | 9/9/2014   | 13/278581          | US | Multi-level Memory Cell with Continuously Tunable Switching                                                                   |

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| 82837232     | Published   |               | 3/27/2009   |            | 13/255158          | US | SWITCHABLE JUNCTION WITH INTRINSIC DIODE                                                                    |
| 82853050     | Granted     | 8530880       | 7/27/2009   | 41527      | 13/259168          | US | Reconfigurable Multilayer Circuit                                                                           |
| 82853070     | Allowed     |               | 7/28/2009   |            | 13/322291          | US | MEMRISTORS WITH ASYMMETRIC ELECTRODES                                                                       |
| 82853130     | Granted     | 8982601       | 9/4/2009    | 3/17/2015  | 13/259183          | US | SWITCHABLE JUNCTION WITH AN INTRINSIC DIODE FOR REDUCED POWER CONSUMPTION                                   |
| 82902121     | Granted     |               |             |            |                    |    | WITH A VOLTAGE DEPENDENT RESISTOR                                                                           |
| 82924259     | Granted     | 8928560       | 3/20/2012   | 42010      | 13/424776          | US | DISPLAY MATRIX WITH RESISTANCE SWITCHES                                                                     |
|              |             | 8891284       | 9/4/2009    | 41961      | 13/383572          | US | MEMRISTORS BASED ON MIXED-METAL-VALENCE COMPOUNDS                                                           |
| 82925135     | Published   |               | 3/12/2010   |            | 13/384004          | US | INTERCONNECTION ARCHITECTURE FOR MEMORY STRUCTURES                                                          |
| 83013639     | Granted     | 8779409       | 9/28/2012   | 41835      | 13/629946          | US | LOW ENERGY MEMRISTORS WITH ENGINEERED SWITCHING CHANNEL MATERIALS                                           |
| 83096719     | Allowed     |               | 1/31/2013   |            | 13/755667          | US | Crossbar Memory to Provide Content Addressable Functionality                                                |
| 83100752     | Granted     | 9035272       | 1/16/2013   | 42143      | 13/742939          | US | NANOPARTICLE-BASED MEMRISTOR STRUCTURE                                                                      |
| 83168704     | Published   |               | 8/30/2010   |            | 13/811023          | US | Multilayer Memory Array                                                                                     |
| 83255751     | Published   |               | 1/31/2011   |            | 13/884107          | US | METHOD AND CIRCUIT FOR SWITCHING A MEMRISTIVE DEVICE                                                        |
| 84020498     | Published   |               | 4/25/2012   |            | 14/385259          | US | NONLINEAR MEMRISTORS                                                                                        |
| 84020521     | Allowed     |               | 4/26/2012   |            | 14/385544          | US | CUSTOMIZABLE NONLINEAR ELECTRICAL DEVICES                                                                   |
| 84193771     | Application |               | 1/18/2013   |            | 14/759725          | US | INTERCONNECTION ARCHITECTURE FOR MULTILAYER CIRCUITS                                                        |
| 82081493     | Granted     | 7487508       | 5/16/2002   | 39847      | 10/147256          | US | System And Method For Reconstructing Client Web Page Accesses From Captured Network Packets                 |
| 82081496     | Granted     | 7246101       | 5/16/2002   | 7/17/2007  | 10/147619          | US | Knowledge-based System And Method For Reconstructing Client Web Page Accesses From Captured Network Packets |
| 82087733     | Granted     | 7953858       | 1/17/2003   | 5/31/2011  | 10/346067          | US | Method And Apparatus For Mapping Peers To An Overlay Network                                                |
| 82087736     | Granted     | 7266082       | 8/30/2002   | 9/4/2007   | 10/231184          | US | Expressway Routing Among Peers                                                                              |
| 82136492     | Granted     | 6262987       | 3/26/1998   | 7/17/2001  | 09/048650          | US | SYSTEM AND METHOD FOR REDUCING LATENCIES WHILE TRANSLATING INTERNET HOST NAME ADDRESS BINDINGS              |
| 82200677     | Granted     | 7529196       | 12/7/2004   | 5/5/2009   | 11/006041          | US | Routing A Service Query In An Overlay Network                                                               |
| 82205858     | Granted     | 7636325       | 12/7/2004   | 12/22/2009 | 11/006068          | US | Determining Highest Workloads For Nodes In An Overlay Network                                               |
| 82217966     | Granted     | 7733913       | 7/31/2006   | 6/8/2010   | 11/496321          | US | Stripping Data Over Transmission Channels                                                                   |
| 82231577     | Granted     | 8125991       | 7/31/2007   | 2/28/2012  | 11/831890          | US | Network Switch Using Managed Addresses For Fast Route Lookup                                                |
| 82250243     | Granted     | 8625485       | 4/30/2009   | 41646      | 12/433718          | US | Dataflow Routing In A Multi-hop Wireless Network                                                            |
| 82258178     | Application |               | 8/31/2009   |            | 12/551281          | US | End-point Multi-pathing For Scalable Ethernet                                                               |
| 82259552     | Published   |               | 12/9/2009   |            | 12/634224          | US | Packet-based Networking System                                                                              |

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| 82261106     | Granted     | 8503307       | 5/10/2010   | 8/6/2013   | 12/662885          | US | Distributing Decision Making In A Centralized Flow Routing System                                                                                   |
| 83140543     | Granted     | 9001927       | 1/31/2013   | 42101      | 13/755694          | US | TRANSMITTING A WIRELESS SIGNAL BASED ON DETECTED SIGNAL INTERFERENCE                                                                                |
| 84064706     | Application |               | 10/2/2014   |            | 14/504932          | US | Tenant Isolation In A Multi-tenant Cloud System                                                                                                     |
| 84084076     | Application |               | 4/20/2012   |            | 14/395612          | US | CONTROLLING DATA RATES OF DATA FLOWS BASED ON INFORMATION INDICATING CONGESTION                                                                     |
| 84103246     | Published   |               | 7/31/2012   |            | 14/400370          | US | BANDWIDTH GUARANTEE AND WORK CONSERVATION                                                                                                           |
| 84312617     | Application |               | 1/14/2013   |            | 14/760698          | US | WIRELESS TRANSMITTER TO OPTIMIZE THROUGHPUT BY CONTROLLING TIME-AVERAGE BLOCK SIZE OF RECEIVERS                                                     |
| 90017124     | Application |               | 1/31/2013   |            | 14/763810          | US | Performing an Index Operation in a MapReduce Environment                                                                                            |
| 82168088     | Granted     | 6922496       | 1/31/2003   | 7/26/2005  | 10/355663          | US | Integrated Vcels On ASIC Module Using Flexible Electrical Connections                                                                               |
| 82178447     | Granted     | 7251388       | 8/10/2004   | 7/31/2007  | 10/915641          | US | APPARATUS FOR PROVIDING OPTICAL COMMUNICATION BETWEEN INTEGRATED CIRCUITS OF DIFFERENT PC BOARDS AND AN INTEGRATED CIRCUIT ASSEMBLY FOR USE THEREIN |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82198427     | Granted     | 7692840       | 6/4/2008    | 4/6/2010   | 12/156876          | US | Composite Material With Controllable Resonant Cells                                                                                                 |
| 82201859     | Granted     | 7050659       | 3/31/2005   | 5/23/2006  | 11/096670          | US | Optically Modulable Photonic Bandgap Medium                                                                                                         |
| 82201862     | Granted     | 7492803       | 6/10/2005   | 39861      | 11/149511          | US | Fiber-coupled Single Photon Source                                                                                                                  |
| 82212848     | Granted     | 7349613       | 1/24/2006   | 39532      | 11/338305          | US | Photonic Crystal Devices Including Gain Material And Methods For Using The Same                                                                     |
| 82214600     | Granted     | 7546013       | 5/31/2006   | 39973      | 11/444222          | US | Nanoparticle Coupled To Waveguide                                                                                                                   |
| 82214660     | Granted     | 7389014       | 3/31/2006   | 39616      | 11/393845          | US | Integrated Semiconductor Circuits And Methods Of Making Integrated Semiconductor Circuits                                                           |
| 82214663     | Granted     | 7359111       | 1/8/2007    | 39553      | 11/651315          | US | Optical Steering Device And Method                                                                                                                  |
| 82224152     | Granted     | 8212235       | 4/25/2007   | 7/3/2012   | 11/790446          | US | NANOWIRE-BASED OPTO-ELECTRONIC DEVICES                                                                                                              |
| 82225271     | Granted     | 7570409       | 10/12/2006  | 8/4/2009   | 11/581193          | US | Radiation Modulation By Reflection From Controlled Composite Material                                                                               |
| 82226957     | Granted     | 7711213       | 1/29/2007   | 5/4/2010   | 11/699092          | US | Nanowire-based Modulators                                                                                                                           |
| 82227020     | Granted     | 7561761       | 1/3/2007    | 7/14/2009  | 11/648968          | US | Photonic Systems And Methods For Encoding Data In Carrier Electromagnetic Waves                                                                     |
| 82227707     | Granted     | 7446929       | 4/25/2007   | 39756      | 11/796085          | US | Photonic Device Including At Least One Electromagnetic Resonator Operably Coupled To A State-change Material                                        |
| 82227767     | Granted     | 7805041       | 3/21/2007   | 40449      | 11/726104          | US | Electromagnetic Radiation Amplification Systems Based On Photonic Gratings                                                                          |
| 82230521     | Granted     | 7719771       | 7/25/2007   | 5/18/2010  | 11/881182          | US | Deformable Optical Element, Methods Of Making And Uses Thereof                                                                                      |
| 82230578     | Granted     | 7989841       | 7/31/2007   | 8/2/2011   | 11/831704          | US | FAST INJECTION OPTICAL SWITCH                                                                                                                       |

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| 82230581     | Granted   | 8746989       | 10/15/2007  | 6/10/2014  | 11/974692          | US | Board To Board Optical Interconnect Using An Optical Interconnect Assembly                           |
| 82230704     | Granted   | 7593606       | 7/30/2007   | 9/22/2009  | 11/888032          | US | OPTICAL MODULATOR INCLUDING WAVEGUIDE GRATINGS                                                       |
| 82234514     | Granted   | 8315526       | 6/18/2007   | 11/20/2012 | 11/820299          | US | STRUCTURE AND MULTIPLE QUANTUM WELL LAYER                                                            |
| 82234760     | Granted   | 7668420       | 7/26/2007   | 2/23/2010  | 11/829048          | US | Misalignment Tolerant Free Space Optical Transceiver                                                 |
| 82234763     | Granted   | 7639903       | 10/15/2007  | 12/29/2009 | 11/974711          | US | Optical Waveguide Ring Resonator With An Intracavity Aperture Element                                |
| 82238321     | Granted   | 8767301       | 1/31/2008   | 7/1/2014   | 12/864214          | US | Daisy Chain Optical Interconnect                                                                     |
| 82239629     | Granted   | 7845860       | 10/20/2008  | 12/7/2010  | 12/254490          | US | MEMS-BASED PELLICLE BEAMSPLITTER                                                                     |
| 82239821     | Granted   | 8202012       | 10/31/2008  | 6/19/2012  | 12/263352          | US | Method For Connecting Multicore Fibers To Optical Devices                                            |
| 82258424     | Granted   | 8194302       | 12/15/2009  | 6/5/2012   | 12/638182          | US | ELECTRO-OPTICAL CONNECTOR AND METHODS FOR ALIGNING                                                   |
| 82262609     | Granted   | 8472808       | 10/6/2010   | 6/25/2013  | 12/898798          | US | ACTIVE CHIRAL PHOTONIC METAMATERIAL                                                                  |
| 82263983     | Granted   | 8909007       | 10/29/2010  | 12/9/2014  | 12/915964          | US | OPTICAL DATA PATH SYSTEMS                                                                            |
| 82275782     | Granted   | 8503848       | 1/27/2011   | 8/6/2013   | 13/015546          | US | CIRCUIT SWITCHABLE OPTICAL DEVICE                                                                    |
| 82276091     | Granted   | 8654812       | 1/25/2011   | 2/18/2014  | 13/013609          | US | WAVEGUIDE ARRAYS                                                                                     |
| 82395255     | Granted   | 8711484       | 5/6/2008    | 4/29/2014  | 12/991106          | US | Q-SWITCHED GRATING VERTICAL-CAVITY SURFACE-EMITTING LASER SYSTEM AND METHOD FOR FABRICATING THE SAME |
| 82405288     | Granted   | 8737845       | 5/7/2008    | 4/1786     | 12/991109          | US | FABRICATION OF THIN PELLICLE BEAM SPLITTERS                                                          |
| 82573374     | Granted   | 8391714       | 6/17/2008   | 3/5/2013   | 12/999620          | US | OPTICAL ENGINE FOR POINT-TO-POINT COMMUNICATIONS                                                     |
| 82576826     | Granted   | 8600203       | 6/9/2008    | 12/3/2013  | 12/995881          | US | Optical Broadcast Systems And Methods                                                                |
| 82654576     | Granted   | 8526771       | 9/15/2008   | 9/3/2013   | 13/061459          | US | Cylindrical Resonators For Optical Signal Routing                                                    |
| 82853147     | Granted   | 8526816       | 10/29/2009  | 9/3/2013   | 13/259560          | US | IN-PLANE OPTICAL WAVE GUIDE WITH AREA BASED SPLITTER                                                 |
| 82859851     | Granted   | 8965212       | 4/29/2009   | 42059      | 13/262807          | US | OPTICAL DATA BUS AND METHOD                                                                          |
| 82951982     | Granted   | 8983248       | 7/31/2012   | 3/17/2015  | 13/562487          | US | OPTICAL MEMORY EXPANSION                                                                             |
| 83013665     | Published |               | 7/30/2012   |            | 13/561751          | US | OPTICAL TRANSMISSION MEDIA TO INDEPENDENTLY SUPPORT SINGLE-MODE AND MULTIMODE SIGNALS                |
| 83013742     | Published |               | 7/27/2012   |            | 13/560450          | US | COPLANAR ROUTING FOR OPTICAL TRANSMISSION                                                            |
| 83097054     | Published |               | 4/13/2010   |            | 13/640348          | US | SPATIAL MULTIPLEXING FOR OPTICAL TRANSMISSION                                                        |
| 83119816     | Granted   | 8947796       | 5/7/2010    | 2/3/2015   | 13/640343          | US | CONTROLLING PHASE RESPONSE IN A SUB-WAVELENGTH GRATING LENS                                          |
| 83242146     | Granted   | 9013784       | 10/29/2010  | 42115      | 13/881195          | US | TELECENTRIC OPTICAL ASSEMBLY                                                                         |
| 83277168     | Published |               | 1/7/2011    |            | 13/991461          | US | NANOPARTICLE WAVEGUIDE APPARATUS, SYSTEM AND METHOD                                                  |
| 83699786     | Granted   | 9103973       | 4/20/2011   | 42227      | 14/009775          | US | DYNAMIC OPTICAL CROSSBAR ARRAY                                                                       |
| 83706052     | Published |               | 4/20/2011   |            | 14/111720          | US | SUB-WAVELENGTH GRATING-BASED OPTICAL ELEMENTS                                                        |
|              |           |               |             |            |                    |    | LIGHT-DETECTION SYSTEMS                                                                              |

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| 83734834     | Published   |               | 5/23/2011   |            | 14/118743 US       |    | OPTICAL TRANSMISSION SYSTEM                                                                              |
| 83776646     | Published   |               | 2/6/2014    |            | 14/174119 US       |    | Optical Bus System                                                                                       |
| 83959900     | Published   |               | 1/31/2012   |            | 14/365294 US       |    | HYBRID ELECTRO-OPTICAL PACKAGE FOR AN OPTO-ELECTRONIC ENGINE                                             |
| 83959983     | Published   |               | 1/31/2012   |            | 14/365261 US       |    | OPTICAL ARCHITECTURES, OPTICAL DISTRIBUTION MATRICES AND METHODS OF MANUFACTURING OPTICAL STRUCTURES     |
|              |             |               |             |            |                    |    |                                                                                                          |
| 84195016     | Application |               | 1/28/2013   |            | 14/764005 US       |    | RADIUSED ALIGNMENT POST FOR SUBSTRATE MATERIALS                                                          |
| 84295471     | Application |               | 7/28/2015   |            | 14/811385 US       |    | UNIDIRECTIONAL RING LASERS                                                                               |
| 82976914     | Granted     | 9106578       | 5/31/2012   | 8/11/2015  | 13/485837 US       |    | CORE NETWORK ARCHITECTURE                                                                                |
| 83130081     | Application |               | 11/30/2012  |            | 13/691120 US       |    | NETWORK ROUTING                                                                                          |
| 84260111     | Application |               | 7/31/2015   |            | 14/814786 US       |    | SHORT-TERM SECURITY CERTIFICATES                                                                         |
| 81942209     | Granted     | 5982573       | 12/15/1993  | 11/9/1999  | 08/168805 US       |    | Disk Drive And Method For Minimizing Shock-Induced Damage                                                |
| 82097534     | Granted     | 8046624       | 10/20/2003  | 10/25/2011 | 10/687694 US       |    | Propagation Of Viruses Through An Information Technology Network                                         |
| 82274846     | Allowed     |               | 12/21/2006  |            | 11/643553 US       |    | Network Traffic Redirection In Bi-planar Networks                                                        |
| 82274906     | Application |               | 7/31/2008   |            | 12/183642 US       |    | Zero Copy Packet Buffering Using Shadow Sends                                                            |
| 82920017     | Granted     | 8570866       | 2/9/2012    | 10/29/2013 | 13/369813 US       |    | System and Method for Processing Network Packet Flows                                                    |
| 83235754     | Allowed     |               | 4/26/2013   |            | 13/871797 US       |    | METHODS AND SYSTEMS FOR FULL PATTERN MATCHING IN HARDWARE                                                |
| 82929503     | Granted     | 8935409       | 1/20/2011   | 42017      | 13/387334 US       |    | Method for Controlling Flow in a Stack System and Chassis Switch in a Stack System                       |
| 82579242     | Application |               | 11/11/2009  |            | 12/616649 US       |    | Network Monitoring System Employing Bi-Directional Communication                                         |
| 82579259     | Granted     | 7260844       | 9/3/2003    | 8/21/2007  | 10/655062 US       |    | Threat Detection In A Network Security System                                                            |
| 82579265     | Granted     | 7565696       | 12/10/2003  | 7/21/2009  | 10/733073 US       |    | Synchronizing Network Security Devices Within A Network Security System                                  |
| 82579279     | Granted     | 9027120       | 10/10/2003  | 42129      | 10/683191 US       |    | Hierarchical Architecture In A Network Security System                                                   |
| 82579322     | Granted     | 9100422       | 10/27/2004  | 42220      | 10/974105 US       |    | Network Zone Identification In A Network Security System                                                 |
| 82579328     | Granted     | 8065732       | 12/3/2009   | 40869      | 12/630573 US       |    | Object Reference In A System                                                                             |
| 82579348     | Granted     | 7437359       | 4/5/2006    | 39735      | 11/398863 US       |    | Merging Multiple Log Entries In Accordance With Merge Properties And Mapping Properties                  |
| 82579554     | Allowed     |               | 9/4/2009    |            | 12/554541 US       |    | Storing Log Data Efficiently While Supporting Querying                                                   |
| 82962722     | Granted     | 8745010       | 4/12/2012   | 6/3/2014   | 13/445725 US       |    | DATA STORAGE AND ARCHIVING SPANNING MULTIPLE DATA STORAGE SYSTEMS                                        |
| 83012895     | Granted     | 8793251       | 7/31/2012   | 7/29/2014  | 13/562728 US       |    | INPUT PARTITIONING AND MINIMIZATION FOR AUTOMATON IMPLEMENTATIONS OF CAPTURING GROUP REGULAR EXPRESSIONS |

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| 83082902     | Published    |               | 7/31/2012   |            | 13/563506          | US | DATA STORAGE COMBINING ROW-ORIENTED AND COLUMN-ORIENTED DATA STORES                                                                                                                                                              |
| 83131990     | Granted      | 9009139       | 6/10/2011   | 4/14/2015  | 13/699953          | US | QUERY PIPELINE                                                                                                                                                                                                                   |
| 83137586     | Published    |               | 6/1/2011    |            | 13/7700330         | US | Dynamic Multidimensional Schemas for Event Monitoring                                                                                                                                                                            |
| 83817971     | Published    |               | 11/18/2011  |            | 14/358500          | US | QUERY SUMMARY GENERATION USING ROW-COLUMN DATA STORAGE                                                                                                                                                                           |
| 84111773     | Acknowledged |               |             |            |                    | US | Multi-Agent System powered Precognitive and Prescriptive Security Analytics detects anomalies using supervised and unsupervised models and analyzing instructions & data flow across multiple levels of network & μ-architecture |
| 82098659     | Granted      | 7246222       | 4/21/2003   | 7/17/2007  | 10/420287          | US | PROCESSOR TYPE DETERMINATION BASED ON RESET VECTOR CHARACTERISTICS                                                                                                                                                               |
| 82118579     | Granted      | 7003563       | 11/2/2001   | 2/21/2006  | 10/003649          | US | REMOTE MANAGEMENT SYSTEM FOR MULTIPLE SERVERS                                                                                                                                                                                    |
| 82119638     | Granted      | 7340512       | 8/26/2005   | 3/4/2008   | 11/213162          | US | System And Method For Remote Discovery And Configuration Of A Network Device                                                                                                                                                     |
| 82128629     | Granted      | 6070253       | 12/31/1996  | 5/30/2000  | 08/775819          | US | COMPUTER DIAGNOSTIC BOARD THAT PROVIDES SYSTEM MONITORING AND PERMITS REMOTE TERMINAL ACCESS                                                                                                                                     |
| 82129937     | Granted      | 5964875       | 9/2/1997    | 10/12/1999 | 08/921968          | US | METHOD AND APPARATUS FOR IDENTIFICATION OF FEATURES ASSOCIATED WITH COMPUTERS                                                                                                                                                    |
| 82129943     | Granted      | 6167538       | 3/6/1998    | 12/26/2000 | 09/036263          | US | METHOD AND APPARATUS FOR MONITORING COMPONENTS OF A COMPUTER SYSTEM                                                                                                                                                              |
| 82131998     | Granted      | 6223271       | 7/15/1998   | 4/24/2001  | 09/116048          | US | SYSTEM AND METHOD FOR DETECTING SYSTEM MEMORY SIZE USING ROM BASED PAGING TABLES                                                                                                                                                 |
| 82132436     | Granted      | 6052288       | 5/6/1999    | 4/18/2000  | 09/306133          | US | SWELL-LATCH PRINTED CIRCUIT BOARD ENGAGEMENT MECHANISM                                                                                                                                                                           |
| 82136561     | Granted      | 6247109       | 6/10/1998   | 6/12/2001  | 09/095187          | US | DYNAMICALLY ASSIGNING CPUS TO DIFFERENT PARTITIONS EACH HAVING AN OPERATION SYSTEM INSTANCE IN A SHARED MEMORY SPACE                                                                                                             |
| 82170149     | Granted      | 7363484       | 9/15/2003   | 4/22/2008  | 10/662563          | US | Apparatus And Method For Selectively Mapping Proper Boot Image To Processors Of Heterogeneous Computer Systems                                                                                                                   |
| 82204112     | Granted      | 8392546       | 10/28/2005  | 3/5/2013   | 11/262020          | US | Distributed Managed System, System Components, And Methods Of Communicating Commands                                                                                                                                             |
| 82260545     | Granted      | 8713350       | 12/8/2009   | 4/29/2014  | 12/633648          | US | Handling Errors In A Data Processing System                                                                                                                                                                                      |
| 82260608     | Granted      | 8230261       | 12/17/2009  | 7/24/2012  | 12/641043          | US | Field Replaceable Unit Acquittal Policy                                                                                                                                                                                          |
| 82660112     | Granted      | 8205016       | 3/11/2011   | 6/19/2012  | 13/046339          | US | CONTROLLER RECEIVING A CONFIGURATION COMMAND WHILE RECEIVING AN AUXILIARY SUPPLY VOLTAGE.                                                                                                                                        |
| 82852234     | Granted      | 8839032       | 12/8/2009   | 9/16/2014  | 13/258392          | US | Managing Errors In A Data Processing System                                                                                                                                                                                      |
| 84027726     | Published    |               | 2/23/2012   |            | 14/379747          | US | Firmware Package to Modify Active Firmware                                                                                                                                                                                       |

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| 84114999     | Application |               | 1/26/2015   |            | 14/605384          | US | HARDWARE SIGNAL LOGGING IN EMBEDDED BLOCK<br>RANDOM ACCESS MEMORY                       |
| 84291309     | Application |               | 1/15/2013   |            | 14/759199          | US | Dynamic Firmware Updating                                                               |
| 82836837     | Published   |               | 8/2/2006    |            | 11/461926          | US | AUTOMATIC VERTICAL-DATABASE DESIGN                                                      |
| 82850153     | Published   |               | 4/30/2012   |            | 13/459722          | US | DATABASE RECOVERY BY CONTAINER                                                          |
| 82094978     | Granted     | 7509395       | 11/13/2003  | 3/24/2009  | 10/712819          | US | Data Delivery                                                                           |
| 82192247     | Granted     | 7581108       | 4/21/2004   | 8/25/2009  | 10/829714          | US | METHOD AND SYSTEM FOR GENERATING TIME-BASED<br>IDENTIFIERS                              |
| 82257737     | Published   |               | 8/1/2008    |            | 12/184835          | US | PLATFORM PROVISIONING SYSTEM AND METHOD                                                 |
| 82190684     | Granted     | 8805803       | 8/12/2004   | 8/12/2014  | 10/916877          | US | INDEX EXTRACTION FROM DOCUMENTS                                                         |
| 82947648     | Granted     | 8224642       | 11/20/2008  | 7/17/2012  | 12/275027          | US | AUTOMATED IDENTIFICATION OF DOCUMENTS AS NOT<br>BELONGING TO ANY LANGUAGE               |
| 82948106     | Granted     | 6738100       | 12/20/2000  | 5/18/2004  | 09/742937          | US | METHOD FOR DETECTING SCENE CHANGES IN A DIGITAL<br>VIDEO STREAM                         |
| 82948298     | Granted     | 6738764       | 5/8/2001    | 5/18/2004  | 09/851618          | US | APPARATUS AND METHOD FOR ADAPTIVELY RANKING<br>SEARCH RESULTS                           |
| 82948633     | Granted     | 8311986       | 9/16/2010   | 11/13/2012 | 12/883788          | US | DETERMINING DATABASE RECORD CONTENT CHANGES                                             |
| 82948647     | Granted     | 6259969       | 2/3/1998    | 7/10/2001  | 09/017760          | US | System and method for automatically verifying the<br>performance of a virtual robot     |
| 82951896     | Granted     | 8171509       | 6/18/2004   | 5/1/2012   | 10/872191          | US | SYSTEM AND METHOD FOR APPLYING A DATABASE TO VIDEO<br>MULTIMEDIA                        |
| 82951899     | Granted     | 6999971       | 5/8/2001    | 2/14/2006  | 09/851640          | US | APPARATUS AND METHOD FOR PARAMETRIC GROUP<br>PROCESSING                                 |
| 90068711     | Instructed  |               |             |            |                    | US | Encryption technique to enable secure deduplication of data                             |
| 82118201     | Granted     | 7120248       | 3/26/2001   | 39000      | 09/818914          | US | Multiple Prime Number Generation Using A Parallel Prime<br>Number Search Algorithm      |
| 82122077     | Granted     | 7660421       | 6/28/2002   | 40218      | 10/187404          | US | Method And System For Secure Storage, Transmission And<br>Control Of Cryptographic Keys |
| 82171334     | Granted     | 8045713       | 3/30/2004   | 10/25/2011 | 10/814608          | US | Cryptographic Key Update Management Method And<br>Apparatus                             |
| 82833030     | Granted     | 8930154       | 1/20/2012   | 1/6/2015   | 13/355315          | US | FIRST AND SECOND VOLTAGE MEASUREMENTS TO ADJUST A<br>VOLTAGE MEASURER                   |
| 82962805     | Published   |               | 4/25/2012   |            | 13/455867          | US | MICROPROCESSOR TESTING CIRCUIT                                                          |
| 84265690     | Application |               | 7/31/2015   |            | 14/815659          | US | KEY OBFUSCATION                                                                         |
| 81974795     | Granted     | 6922773       | 12/29/2000  | 38559      | 09/751408          | US | System And Method For Encoding Constant Operands In A<br>Wide Issue Processor           |
| 81977360     | Granted     | 7028164       | 12/29/2000  | 38818      | 09/751679          | US | Instruction Fetch Apparatus For Wide Issue Processors And<br>Method Of Operation        |
| 81977915     | Granted     | 7246213       | 7/28/2004   | 39280      | 10/902406          | US | Data Address Security Device And Method                                                 |



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| 81984722     | Granted | 6762907       | 6/7/2001    | 38181      | 09/876566          | US | Disc Drive Having Integral Base Cooling                  |
| 81991091     | Granted | 6993754       | 11/13/2001  | 38748      | 09/992642          | US | Annotations To Executable Images For Improved Dynamic    |
| 81991094     | Granted | 6915513       | 11/29/2001  | 38538      | 09/997062          | US | Optimization Of Functions                                |
| 81998207     | Granted | 8209371       | 11/7/2002   | 41086      | 10/289379          | US | System And Method For Dynamically Replacing Code         |
|              |         |               |             |            |                    |    | Method & System For Managing Communication In A          |
|              |         |               |             |            |                    |    | Computer Network Using Aliases Of Computer Network       |
|              |         |               |             |            |                    |    | Addresses                                                |
| 82041788     | Granted | 6839739       | 2/9/1999    | 1/4/2005   | 09/246479          | US | Computer Architecture With Caching Of History Counter    |
|              |         |               |             |            |                    |    | Dynamic Page Placement                                   |
| 82043156     | Granted | 6880045       | 10/12/2001  | 38454      | 09/976495          | US | MULTI-PROCESSOR COMPUTER SYSTEM WITH                     |
|              |         |               |             |            |                    |    | TRANSACTIONAL MEMORY                                     |
| 82055144     | Granted | 6418017       | 3/30/2000   | 37446      | 09/539724          | US | Heat Dissipating Chassis Member                          |
| 82078871     | Granted | 6628520       | 2/6/2002    | 9/30/2003  | 10/066726          | US | Method, Apparatus, And System For Cooling Electronic     |
|              |         |               |             |            |                    |    | Components                                               |
| 82085489     | Granted | 8798964       | 11/6/2002   | 8/5/2014   | 10/289662          | US | Methods And Apparatus For Designing The Ranking And      |
|              |         |               |             |            |                    |    | Wiring Configurations For Pieces Of Hardware             |
| 82090361     | Granted | 7073029       | 1/27/2003   | 38902      | 10/351357          | US | Storage System Using Fast Storage And Log-structured     |
|              |         |               |             |            |                    |    | Storage                                                  |
| 82097039     | Granted | 7424528       | 11/27/2002  | 39700      | 10/306279          | US | System And Method For Measuring The Capacity Of A        |
|              |         |               |             |            |                    |    | Streaming Media Server                                   |
| 82097228     | Granted | 6970387       | 9/15/2003   | 11/29/2005 | 10/662643          | US | System And Method For Determining The Value Of A Memory  |
|              |         |               |             |            |                    |    | Element                                                  |
| 82099346     | Granted | 7272732       | 6/30/2003   | 39343      | 10/608206          | US | Controlling Power Consumption Of At Least One Computer   |
|              |         |               |             |            |                    |    | System                                                   |
| 82099349     | Granted | 6813897       | 7/29/2003   | 11/9/2004  | 10/628284          | US | Supplying Power To At Least One Cooling System Component |
|              |         |               |             |            |                    |    |                                                          |
| 82100222     | Granted | 7913226       | 10/1/2003   | 40624      | 10/676557          | US | INTERPOSING A VIRTUAL MACHINE MONITOR AND                |
|              |         |               |             |            |                    |    | DEVIRTUALIZING COMPUTER HARDWARE AT RUNTIME              |
| 82103966     | Granted | 7184267       | 12/12/2003  | 2/27/2007  | 10/735467          | US | Longitudinally Cooled Electronic Assembly                |
| 82135994     | Granted | 6173293       | 3/13/1998   | 1/9/2001   | 09/039057          | US | SCALABLE DISTRIBUTED FILE SYSTEM                         |
| 82136243     | Granted | 6195748       | 11/26/1997  | 2/27/2001  | 08/979033          | US | APPARATUS FOR SAMPLING INSTRUCTION EXECUTION             |
|              |         |               |             |            |                    |    | INFORMATION IN A PROCESSOR PIPELINE                      |
| 82136369     | Granted | 6332178       | 11/26/1997  | 12/18/2001 | 08/980165          | US | METHOD FOR ESTIMATING STATISTICS OF PROPERTIES OF        |
|              |         |               |             |            |                    |    | MEMORY SYSTEM TRANSACTIONS                               |
| 82136372     | Granted | 6237059       | 11/26/1997  | 5/22/2001  | 08/979398          | US | METHOD FOR ESTIMATING STATISTICS OF PROPERTIES OF        |
|              |         |               |             |            |                    |    | MEMORY SYSTEM INTERACTIONS AMONG CONTEXTS IN A           |
|              |         |               |             |            |                    |    | COMPUTER SYSTEM                                          |
| 82136873     | Granted | 6480876       | 5/28/1998   | 11/12/2002 | 09/085795          | US | SYSTEM FOR INTEGRATING TASK AND DATA PARALLELISM IN      |
|              |         |               |             |            |                    |    | DYNAMIC APPLICATIONS                                     |

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| 82165523     | Granted | 5933598       | 7/17/1996   | 36375      | 08/682348          | US | A METHOD FOR SHARING VARIABLE-GRAINED MEMORY OF WORKSATIONS BY SENDING PARTICULAR BLOCK INCLUDING LINE AND SIZE OF THE BLOCK TO EXCHANGE SHARED DATA STRUCTURES |
| 82169087     | Granted | 7451146       | 6/30/2004   | 11/11/2008 | 10/883118          | US | Almost Non-blocking Linked Stack Implementation                                                                                                                 |
| 82171766     | Granted | 7272945       | 7/29/2003   | 9/25/2007  | 10/628369          | US | Environmental Condition Measurement System                                                                                                                      |
| 82175513     | Granted | 7437559       | 11/19/2003  | 39735      | 10/716588          | US | Electronic Message Authentication                                                                                                                               |
| 82178633     | Granted | 7250695       | 10/31/2003  | 7/31/2007  | 10/697686          | US | Controlling Power Supplied To A Circuit Using An Externally Applied Magnetic Field                                                                              |
| 82178888     | Granted | 7673027       | 5/20/2004   | 40239      | 10/850784          | US | Method And Apparatus For Designing Multi-tier Systems                                                                                                           |
| 82180133     | Granted | 7757237       | 6/16/2004   | 40372      | 10/870721          | US | Synchronization Of Threads In A Multithreaded Computer Program                                                                                                  |
| 82190375     | Granted | 7546600       | 38107       | 39973      | 10/837110          | US | Method Of Assigning Virtual Process Identifier To Process Within Process Domain                                                                                 |
| 82190438     | Granted | 8214523       | 6/22/2004   | 7/3/2012   | 10/874128          | US | Interconnection Fabric Connection                                                                                                                               |
| 82197116     | Granted | 7536585       | 6/23/2005   | 5/19/2009  | 11/166670          | US | Method Of Estimating Storage System Availability                                                                                                                |
| 82197119     | Granted | 7467329       | 6/23/2005   | 12/16/2008 | 11/166851          | US | Method Of Estimating Storage System Reliability                                                                                                                 |
| 82197800     | Granted | 7761663       | 2/16/2006   | 7/20/2010  | 11/357776          | US | OPERATING A REPLICATED CACHE THAT INCLUDES RECEIVING CONFIRMATION THAT A FLUSH OPERATION WAS INITIATED                                                          |
| 82197803     | Granted | 9047306       | 10/17/2005  | 6/2/2015   | 11/252335          | US | Method Of Writing Data                                                                                                                                          |
| 82198175     | Granted | 7376867       | 12/8/2004   | 5/20/2008  | 11/008744          | US | Method Of Seeking Consensus Among Computer Processes                                                                                                            |
| 82198616     | Granted | 7784063       | 6/14/2004   | 8/24/2010  | 10/867048          | US | Method and apparatus for system caller authentication                                                                                                           |
| 82199552     | Granted | 8312003       | 12/16/2004  | 11/13/2012 | 11/014600          | US | Computer Method And Apparatus For Collaborative Web Searches                                                                                                    |
| 82200923     | Granted | 7568360       | 11/1/2005   | 8/4/2009   | 11/264772          | US | Air Re-circulation Effect Reduction System                                                                                                                      |
| 82201235     | Granted | 8185697       | 1/7/2005    | 5/22/2012  | 11/030937          | US | Methods And Systems For Coherence Protocol Tuning                                                                                                               |
| 82202177     | Granted | 7426453       | 1/14/2005   | 9/16/2008  | 11/035320          | US | Workload Placement Based Upon CRAC Unit Capacity Utilizations                                                                                                   |
| 82207604     | Granted | 7669431       | 4/7/2005    | 3/2/2010   | 11/101238          | US | Cooling Provisioning For Heat Generating Devices                                                                                                                |
| 82207853     | Allowed |               | 6/9/2005    |            | 11/148482          | US | System And Method For Inferring Causal Paths In A Distributed Computing Environment                                                                             |
| 82214846     | Granted | 8296760       | 10/27/2006  | 10/23/2012 | 11/588518          | US | Migrating A Virtual Machine From A First Physical Machine In Response To Receiving A Command To Lower A Power Mode Of The First Physical Machine                |
| 82217654     | Granted | 9135074       | 7/20/2006   | 9/15/2015  | 11/489968          | US | System And Method For Evaluating Performance Of A Workload Manager                                                                                              |
| 82217657     | Granted | 8336054       | 7/20/2006   | 41261      | 11/489967          | US | System And Method For Allocating Capacity Of Shared Resources To A Workload                                                                                     |

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| 82217660     | Granted     | 8112756       | 7/20/2006   | 40946      | 11/489971          | US | System And Method For Evaluating A Workload And Its Impact On Performance Of A Workload Manager                                                                                                |
| 82218968     | Granted     | 8214838       | 7/26/2006   | 41093      | 11/493492          | US | System And Method For Attributing To A Corresponding Virtual Machine CPU Utilization Of A Network Driver Domain Based On Weighted Communication                                                |
| 82218971     | Granted     | 8032882       | 7/26/2006   | 40820      | 11/493348          | US | System And Method For Controlling Aggregate CPU Usage By Virtual Machines And Driver Domains                                                                                                   |
| 82225457     | Granted     | 8095803       | 3/9/2007    | 40918      | 11/684534          | US | Protecting The Privacy Of Files Referenced By Their Hash                                                                                                                                       |
| 82227275     | Granted     | 7901131       | 12/22/2006  | 3/8/2011   | 11/644158          | US | Apparatus State Determination Method And System                                                                                                                                                |
| 82227956     | Granted     | 7779127       | 3/9/2007    | 8/17/2010  | 11/684567          | US | SYSTEM AND METHOD FOR DETERMINING A SUBSET OF TRANSACTIONS OF A COMPUTING SYSTEM FOR USE IN DETERMINING RESOURCE COSTS                                                                         |
| 82227959     | Granted     | 9135075       | 3/9/2007    | 42262      | 11/684569          | US | CAPACITY PLANNING FOR COMPUTING SYSTEMS HOSTING MULTI-TIER APPLICATION BASED ON THINK TIME VALUE AND RESOURCE COST OF COMPOSITE TRANSACTION USING STATISTICAL REGRESSION ANALYSIS (as amended) |
| 82229081     | Granted     | 8939824       | 4/30/2007   | 1/27/2015  | 11/796947          | US | Air Moving Device With A Movable Louver                                                                                                                                                        |
| 82229144     | Granted     | 7882508       | 4/27/2007   | 2/1/2011   | 11/796234          | US | Tracing Information Flow Using A Signature                                                                                                                                                     |
| 82230143     | Application |               | 4/30/2007   |            | 11/796944          | US | System And Method For Modular Computing                                                                                                                                                        |
| 82232204     | Granted     | 7902966       | 6/18/2007   | 3/8/2011   | 11/764410          | US | Microcontroller For Controlling An Actuator                                                                                                                                                    |
| 82232762     | Granted     | 8046113       | 7/27/2007   | 10/25/2011 | 11/829716          | US | System And Method For Cooling A Heat-generating Device                                                                                                                                         |
| 82234385     | Granted     | 7756690       | 7/27/2007   | 7/13/2010  | 11/829654          | US | SYSTEM AND METHOD FOR SUPPORTING PERFORMANCE PREDICTION OF A SYSTEM HAVING AT LEAST ONE EXTERNAL INTERACTOR                                                                                    |
| 82239635     | Granted     | 8332847       | 9/23/2008   | 12/11/2012 | 12/236271          | US | Validating Manual Virtual Machine Migration                                                                                                                                                    |
| 82239758     | Published   |               | 10/20/2008  |            | 12/254571          | US | Designing An Apparatus To Substantially Minimize Exergy Destruction                                                                                                                            |
| 82240136     | Granted     | 7945128       | 10/27/2008  | 5/17/2011  | 12/258674          | US | Optical-based Barrier Synchronization Methods And Systems For Implementing The Same                                                                                                            |
| 82240196     | Granted     | 7966519       | 10/13/2008  | 6/21/2011  | 12/250381          | US | Reconfiguration In A Multi-core Processor System With Configurable Isolation                                                                                                                   |
| 82241009     | Granted     | 8560141       | 4/1/2008    | 10/15/2013 | 12/936000          | US | Management Of A 3D Package And Cooling System                                                                                                                                                  |
| 82242503     | Granted     | 8677208       | 9/19/2008   | 3/18/2014  | 12/679449          | US | Generating A Parallel Recovery Plan For A Data Storage System                                                                                                                                  |
| 82242626     | Granted     | 8082400       | 10/1/2008   | 40897      | 12/243657          | US | Partitioning A Memory Pool Among Plural Computing Nodes                                                                                                                                        |
| 82242689     | Granted     | 7966394       | 10/14/2008  | 40715      | 12/250924          | US | Information Model Registry And Brokering In Virtualized Environments                                                                                                                           |
| 82242695     | Published   |               | 10/31/2008  |            | 12/263411          | US | Power Management Using Clustering In A Multicore System                                                                                                                                        |

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| 82243130     | Granted     | 8904383       | 4/10/2008   | 12/2/2014  | 12/936900          | US | Virtual Machine Migration According To Environmental Data                                                                                                 |
| 82244624     | Granted     | 7818145       | 9/30/2008   | 10/19/2010 | 12/241972          | US | Detecting AN Error IN A Prediction Of Resource Usage Of AN APPLICATION IN A VIRTUAL Environment                                                           |
| 82244627     | Granted     | 8145456       | 9/30/2008   | 3/27/2012  | 12/241998          | US | Optimizing A Prediction Of Resource Usage Of An Application In A Virtual Environment                                                                      |
| 82244630     | Granted     | 8180604       | 9/30/2008   | 5/15/2012  | 12/242034          | US | Optimizing A Prediction Of Resource Usage Of Multiple Applications In A Virtual Environment                                                               |
| 82245125     | Granted     | 8074456       | 10/29/2008  | 12/13/2011 | 12/260741          | US | THERMAL MANAGEMENT SYSTEM HAVING THERMOELECTRIC MODULES                                                                                                   |
| 82248620     | Granted     | 9069730       | 6/29/2009   | 6/30/2015  | 12/493602          | US | Coordinated Reliability Management In Virtual Machines In A Virtualized System                                                                            |
| 82249619     | Granted     | 8326807       | 1/23/2009   | 12/4/2012  | 12/359190          | US | Methods Of Measuring Consistability Of A Distributed Storage System                                                                                       |
| 82249622     | Granted     | 8458710       | 9/3/2009    | 6/4/2013   | 12/553643          | US | Scheduling Iobs For Execution On A Computer System                                                                                                        |
| 82258172     | Granted     | 8296496       | 9/17/2009   | 10/23/2012 | 12/561273          | US | Main Memory With Non-volatile Memory And Dram                                                                                                             |
| 82258364     | Granted     | 8537677       | 10/13/2009  | 9/17/2013  | 12/577972          | US | Incremental Adaptive Packet Routing In A Multi-dimensional Network                                                                                        |
| 82259486     | Published   |               | 10/30/2009  |            | 12/609706          | US | Determining Regions Of Influence Of Fluid Moving Devices                                                                                                  |
| 82259612     | Granted     | 8122125       | 9/8/2009    | 2/21/2012  | 12/555552          | US | Deep Packet Inspection (DPI) Using A DPI Core                                                                                                             |
| 82261112     | Granted     | 9104482       | 12/11/2009  | 8/11/2015  | 12/636526          | US | Differentiated Storage Qos                                                                                                                                |
| 82261799     | Granted     | 8407560       | 7/14/2010   | 3/26/2013  | 12/836405          | US | SYSTEMS AND METHODS FOR ENCODING INFORMATION FOR STORAGE IN AN ELECTRONIC MEMORY AND FOR DECODING ENCODED INFORMATION RETRIEVED FROM AN ELECTRONIC MEMORY |
| 82262483     | Granted     | 8812400       | 7/9/2010    | 8/19/2014  | 12/833438          | US | Managing A Memory Segment Using A Memory Virtual Appliance                                                                                                |
| 82263044     | Published   |               | 10/28/2010  |            | 12/913921          | US | MANAGING REPLACEMENT OF AN EXISTING COMPONENT                                                                                                             |
| 82263047     | Published   |               | 6/28/2010   |            | 12/824699          | US | DETERMINING ENVIRONMENTAL IMPACT                                                                                                                          |
| 82263173     | Granted     | 8392574       | 10/29/2010  | 3/5/2013   | 12/915866          | US | PROVIDING SERVICES BASED ON AN ENVIRONMENTAL METRIC                                                                                                       |
| 82263356     | Granted     | 8688288       | 2/7/2011    | 4/1/2014   | 13/022260          | US | MANAGING AN INFRASTRUCTURE HOUSING DISAGGREGATED HEAT SOURCES                                                                                             |
| 82467426     | Granted     | 8683479       | 2/16/2011   | 3/25/2014  | 13/028974          | US | SHIFTING INFORMATION TECHNOLOGY WORKLOAD DEMANDS                                                                                                          |
| 82467429     | Application |               | 2/16/2011   |            | 13/028979          | US | INFORMATION TECHNOLOGY WORKLOAD SHEDDING                                                                                                                  |
| 82467469     | Published   |               | 4/14/2011   |            | 13/086964          | US | PROVISIONING DATA CENTER RESOURCES                                                                                                                        |
| 82595721     | Granted     | 8892728       | 7/21/2011   | 11/18/2014 | 13/187962          | US | Automatic Zone-Based Management of a Data Center                                                                                                          |
| 82595727     | Granted     | 8909762       | 3/17/2011   | 12/9/2014  | 13/050359          | US | NETWORK SYSTEM MANAGEMENT                                                                                                                                 |

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| 82621131     | Granted     | 8788747       | 8/8/2008    | 7/22/2014  | 13/058188          | US | Independently Controlled Virtual Memory Devices In Memory Modules                                   |
| 82642817     | Granted     | 8392035       | 2/9/2011    | 3/5/2013   | 13/024159          | US | System And Method For Cooling An Electronic Device                                                  |
| 82718128     | Published   |               | 11/3/2011   |            | 13/288669          | US | MANAGING THE CARBON FOOTPRINT OF A STRUCTURE                                                        |
| 82833817     | Published   |               | 10/26/2011  |            | 13/282394          | US | MANAGING WORKLOAD AT A DATA CENTER                                                                  |
| 82853256     | Granted     | 8788739       | 6/29/2009   | 7/22/2014  | 13/259113          | US | HYPERVISOR-BASED MANAGEMENT OF LOCAL AND REMOTE VIRTUAL MEMORY PAGES                                |
| 82901995     | Published   |               | 12/14/2012  |            | 13/715163          | US | MULTIPLE SUBARRAY MEMORY ACCESS                                                                     |
| 82902095     | Granted     | 8819376       | 4/23/2012   | 8/26/2014  | 13/453982          | US | MERGING ARRAYS USING SHIFTABLE MEMORY                                                               |
| 82963446     | Granted     | 8959118       | 4/30/2012   | 2/17/2015  | 13/460597          | US | File System Managing and Balancing                                                                  |
| 82963512     | Published   |               | 4/4/2012    |            | 13/439410          | US | AUTOMATING WORKLOAD VIRTUALIZATION                                                                  |
| 82963549     | Published   |               | 4/27/2012   |            | 13/458069          | US | Workload Manager for MapReduce Environments                                                         |
| 82963632     | Granted     | 8909987       | 4/27/2012   | 12/9/2014  | 13/458680          | US | RECOVERY SEGMENTS                                                                                   |
| 82979745     | Published   |               | 3/29/2012   |            | 13/434744          | US | CONTROLLED LOCK VIOLATION FOR DATA TRANSACTIONS                                                     |
| 83013473     | Granted     | 9128845       | 7/30/2012   | 9/8/2015   | 13/561219          | US | DYNAMICALLY PARTITION A VOLATILE MEMORY FOR A CACHE AND A MEMORY PARTITION (as amended)             |
| 83105687     | Published   |               | 1/10/2013   |            | 13/738346          | US | DYNAMICALLY BALANCING EXECUTION RESOURCES TO MEET A BUDGET AND A QoS OF PROJECTS                    |
| 83105793     | Allowed     |               | 1/31/2013   |            | 13/755768          | US | MANAGING AN ENTITY USING A STATE MACHINE ABSTRACT                                                   |
| 83130012     | Published   |               | 7/21/2010   |            | 13/810187          | US | ACCESSING A LOCAL STORAGE DEVICE USING AN AUXILIARY PROCESSOR                                       |
| 83135110     | Published   |               | 7/7/2010    |            | 13/808856          | US | Obtaining Rendering Co-ordinates Of Visible Text Elements                                           |
| 83156567     | Allowed     |               | 3/13/2013   |            | 13/799176          | US | DISTRIBUTING PROCESSING OF ARRAY BLOCK TASKS                                                        |
| 83220872     | Granted     | 9081880       | 3/25/2013   | 7/14/2015  | 13/850162          | US | Determining Sustainability Of A Data Center                                                         |
| 83680994     | Published   |               | 4/19/2011   |            | 14/009366          | US | SCHEDULING MAP AND REDUCE TASKS FOR JOBS FOR EXECUTION ACCORDING TO PERFORMANCE GOALS               |
| 83681020     | Published   |               | 3/14/2011   |            | 14/005196          | US | MEMORY INTERFACE                                                                                    |
| 84076024     | Application |               | 10/31/2014  |            | 14/529993          | US | PRIORITY QUEUE HAVING ARRAY AND TREES                                                               |
| 84077713     | Published   |               | 6/8/2012    |            | 14/396324          | US | CHECKPOINTING USING FPGA                                                                            |
| 84192543     | Published   |               | 3/10/2015   |            | 14/643763          | US | MANAGING ARRAY COMPUTATIONS DURING PROGRAMMATIC RUN-TIME IN A DISTRIBUTED COMPUTING ENVIRONMENT     |
| 81951443     | Granted     | 6049851       | 2/14/1994   | 4/11/2000  | 08/196618          | US | Method And Apparatus For Checking Cache Coherency In A Computer Architecture                        |
| 81966359     | Granted     | 6711619       | 12/15/1999  | 3/23/2004  | 09/464351          | US | Method, System, And Apparatus For Distributing And Using Computer-based Applications Over A Network |
| 81966488     | Granted     | 6874138       | 11/28/2000  | 3/29/2005  | 09/724616          | US | Method And Apparatus For Resuming Execution Of A Failed Computer Program                            |

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| 81967112     | Granted | 6662282       | 4/17/2001   | 12/9/2003  | 09/837311          | US | Unified Data Sets Distributed Over Multiple I/O-Device Assemblies                                                                     |
| 81968480     | Granted | 6745322       | 2/18/2000   | 6/1/2004   | 09/507505          | US | Apparatus And Method For Conditionally Flushing A Pipeline Upon A Failure Of A Test Condition                                         |
| 81971234     | Granted | 6675344       | 5/1/2000    | 1/6/2004   | 09/562135          | US | Multiple ECC Schemes To Improve Bandwidth                                                                                             |
| 81972731     | Granted | 6671160       | 3/16/2001   | 12/30/2003 | 09/811078          | US | ESD Prevention Device Enabled Latch                                                                                                   |
| 81974162     | Granted | 6718434       | 5/31/2001   | 4/6/2004   | 09/871043          | US | Method And Apparatus For Assigning Raid Levels                                                                                        |
| 81974789     | Granted | 7337306       | 12/29/2000  | 39504      | 09/751410          | US | Executing Conditional Branch Instructions In A Data Processor Having Clustered Architecture                                           |
| 81974792     | Granted | 7779240       | 9/14/2007   | 8/17/2010  | 11/900978          | US | System And Method For Reducing Power Consumption In A Data Processor Having A Clustered Architecture                                  |
| 81977471     | Granted | 7216184       | 5/1/2001    | 5/8/2007   | 09/846645          | US | System And Method For Identification Of Devices Associated With Input/output Paths                                                    |
| 81978845     | Granted | 6661748       | 3/5/2001    | 12/9/2003  | 09/799316          | US | Position Control For Plunge Mechanism                                                                                                 |
| 81980099     | Granted | 7003799       | 1/30/2001   | 2/21/2006  | 09/774951          | US | Secure Routable File Upload/Download Across The Internet                                                                              |
| 81983528     | Granted | 6691139       | 1/31/2001   | 38027      | 09/774839          | US | Recreation Of Archives At A Disaster Recovery Site                                                                                    |
| 81991082     | Granted | 6928536       | 11/29/2001  | 8/9/2005   | 09/995775          | US | DYNAMIC EXECUTION LAYER INTERFACE FOR REPLACING INSTRUCTIONS REQUIRING UNAVAILABLE HARDWARE FUNCTIONALITY WITH PATCH CODE AND CACHING |
| 81992522     | Granted | 6661651       | 12/11/2001  | 12/9/2003  | 10/015071          | US | Mounting Of Data Storage Devices With Compliant Storage Module Covers                                                                 |
| 81993518     | Granted | 6708285       | 3/15/2001   | 3/16/2004  | 09/810108          | US | Redundant Controller Data Storage System Having System And Method For Handling Controller Resets                                      |
| 81994958     | Granted | 7774611       | 5/6/2002    | 8/10/2010  | 10/138644          | US | Enforcing File Authorization Access                                                                                                   |
| 81995201     | Granted | 6870466       | 4/3/2002    | 3/22/2005  | 10/116183          | US | Data Display System And Method For An Object Traversing A Circuit                                                                     |
| 81999323     | Granted | 8051176       | 11/7/2002   | 11/1/2011  | 10/289259          | US | Method And System For Predicting Connections In A Computer Network                                                                    |
| 82000199     | Granted | 6918027       | 7/30/2001   | 38545      | 09/917983          | US | SYSTEM AND METHOD FOR IN-SYSTEM PROGRAMMING THROUGH AN ON-SYSTEM JTAG                                                                 |
| 82002011     | Granted | 6910142       | 7/28/2001   | 6/21/2005  | 09/917413          | US | System For Detection And Routing Of Platform Events In A Multi-Cell Computer                                                          |
| 82003505     | Granted | 6711045       | 9/6/2002    | 3/23/2004  | 10/236274          | US | Methods And Memory Structures Using Tunnel-Junction Device As Control Element                                                         |
| 82003943     | Granted | 7051195       | 10/26/2001  | 5/23/2006  | 10/002971          | US | Method Of Optimization Of CPU And Chipset Performance By Support Of Optional Reads By CPU And Chipset                                 |
| 82004255     | Granted | 6634898       | 7/30/2001   | 10/21/2003 | 09/918670          | US | Switch Mechanism For Online Replacement Of PCI Cards                                                                                  |
| 82004504     | Granted | 6721857       | 10/23/2001  | 4/13/2004  | 10/002671          | US | Flexible Allegiance Storage And Computing Architecture                                                                                |
| 82005377     | Granted | 6634890       | 10/8/2001   | 10/21/2003 | 09/972545          | US | Spring-Loaded Heat Sink Assembly For A Circuit Assembly                                                                               |
| 82005380     | Granted | 6746270       | 6/23/2003   | 6/8/2004   | 10/602221          | US | Spring-Loaded Heat Sink Assembly For A Circuit Assembly                                                                               |

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| 82007378     | Granted | 6993750       | 12/13/2001  | 1/31/2006  | 10/016955          | US | Dynamic Registration Of Dynamically Generated Code And Corresponding Unwind Information                                                                   |
| 82007381     | Granted | 6996810       | 12/13/2001  | 2/7/2006   | 10/016948          | US | Lazy And Precise Update Of Unwind Information For Dynamically Generated Code                                                                              |
| 82013810     | Granted | 5760608       | 10/21/1996  | 6/2/1998   | 08/731817          | US | High Speed, Low Clock Load Register Dump Circuit                                                                                                          |
| 82014185     | Granted | 5726596       | 3/1/1996    | 35864      | 08/609592          | US | HIGH-PERFORMANCE, LOW-SKEW CLOCKING SCHEME FOR SINGLE-PHASE, HIGH-FREQUENCY GLOBAL VLSI PROCESSOR                                                         |
| 82016435     | Granted | 5875340       | 5/31/1996   | 2/23/1999  | 08/658909          | US | Optimized Storage System And Method For A Processor That Executes Instructions Out Of Order                                                               |
| 82016615     | Granted | 5878261       | 5/15/1996   | 3/2/1999   | 08/648468          | US | Method For Restructuring Code To Reduce Procedure Call Overhead                                                                                           |
| 82016618     | Granted | 5903010       | 10/29/1997  | 5/11/1999  | 08/959887          | US | Quantum Wire Switch And Switching Method                                                                                                                  |
| 82016621     | Granted | 6060724       | 1/11/1999   | 5/9/2000   | 09/228214          | US | QUANTUM WIRE LOGIC GATE                                                                                                                                   |
| 82016741     | Granted | 6466926       | 3/5/1997    | 37544      | 09/142328          | US | METHOD FOR OPTIMIZING A RECOGNITION DICTIONARY TO DISTINGUISH BETWEEN PATTERNS THAT ARE DIFFICULT TO DISTINGUISH                                          |
| 82016867     | Granted | 5835773       | 4/17/1996   | 36109      | 08/633615          | US | Method For Achieving Native Performance Across A Set Of Incompatible Architectures Using A Single Binary File                                             |
| 82016996     | Granted | 5848262       | 6/17/1996   | 12/8/1998  | 08/664483          | US | SIMULATING DIGITAL SYSTEMS BY USING VECTOR PROCESSING                                                                                                     |
| 82017677     | Granted | 5909578       | 9/30/1996   | 6/1/1999   | 08/719854          | US | USE OF DYNAMIC TRANSLATION TO BURST PROFILE COMPUTER APPLICATIONS                                                                                         |
| 82019114     | Granted | 5682298       | 6/13/1996   | 10/28/1997 | 08/664074          | US | Balancing Power Distribution In A Power Supply System With Redundant Power Sources                                                                        |
| 82021679     | Granted | 5790959       | 11/13/1996  | 36011      | 08/747082          | US | Programmable Band Select And Transfer Module For Local Multipoint Distribution Service Basestation                                                        |
| 82022297     | Granted | 5751735       | 11/14/1996  | 35927      | 08/749188          | US | Integrated Debug Trigger Method And Apparatus For An Integrated Circuit                                                                                   |
| 82022300     | Granted | 5771240       | 11/14/1996  | 6/23/1998  | 08/749189          | US | TEST SYSTEMS FOR OBTAINING A SAMPLE-ON-THE-FLY EVENT TRACE FOR AN INTEGRATED CIRCUIT WITH AN INTEGRATED DEBUG TRIGGER APPARATUS AND AN EXTERNAL PULSE PIN |
| 82025669     | Granted | 6059841       | 6/19/1997   | 5/9/2000   | 08/879210          | US | Updating Data Dependencies For Loop Strip Mining                                                                                                          |
| 82030790     | Granted | 6748587       | 1/2/1998    | 6/8/2004   | 09/002404          | US | Programmatic Access To The Widest Mode Floating-Point Arithmetic Supported By A Processor                                                                 |
| 82031231     | Granted | 6550041       | 3/22/1999   | 4/15/2003  | 09/274162          | US | METHOD AND APPARATUS FOR EVALUATING THE DESIGN QUALITY OF NETWORK NODES                                                                                   |
| 82031786     | Granted | 6772316       | 8/29/2002   | 38202      | 10/230188          | US | METHOD AND APPARATUS FOR UPDATING AND INVALIDATING STORE DATA                                                                                             |

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| 82031789     | Granted   | 6920531       | 11/4/2003   | 38552      | 10/699666          | US | Method And Apparatus For Updating And Invalidating State Data                                                                                    |
| 82061570     | Granted   | 7424621       | 9/19/2001   | 9/9/2008   | 09/955223          | US | Data Protection                                                                                                                                  |
| 82062572     | Granted   | 6804073       | 10/30/2001  | 38272      | 09/984625          | US | VARIABLE GAIN AMPLIFIER CONTROLLER                                                                                                               |
| 82064066     | Granted   | 6718410       | 1/18/2001   | 4/6/2004   | 09/761854          | US | SYSTEM FOR TRANSFERRING DATA IN A CD IMAGE FORMAT                                                                                                |
| 82065566     | Granted   | 7000085       | 12/28/2001  | 2/14/2006  | 10/034888          | US | SIZE OF A HOST COMPUTER                                                                                                                          |
| 82067687     | Granted   | 6378007       | 10/30/1998  | 37369      | 09/182307          | US | System And Method For Securing Drive Access To Data Storage Media Based On Medium Identifiers                                                    |
|              |           |               |             |            |                    |    | DATA ENCODING SCHEME ENCODING ALL BUT ONE MEMBER OF A PREDEFINED GROUP OF DATA WITH M-BIT CODEWORDS AND OTHER DATA CODEWORDS IN EXCESS OF M-BITS |
| 82068191     | Granted   | 6275348       | 7/31/1998   | 37117      | 09/126992          | US | Magnetic Tape Apparatus And Method                                                                                                               |
| 82079240     | Granted   | 7603449       | 6/10/2002   | 10/13/2009 | 10/064080          | US | System And Method For Inquiry Caching                                                                                                            |
| 82083857     | Granted   | 8136048       | 11/5/2004   | 40981      | 10/982279          | US | Methods And Apparatus For Providing Menu Data To A Storage Automation Library                                                                    |
| 82095785     | Granted   | 7251544       | 7/1/2003    | 7/31/2007  | 10/612757          | US | Storage System                                                                                                                                   |
| 82095971     | Granted   | 6462906       | 5/11/2001   | 37537      | 09/852635          | US | Magnetic Tape Cartridge                                                                                                                          |
| 82097471     | Granted   | 6816917       | 1/15/2003   | 38300      | 10/346045          | US | Storage System With LUN Virtualization                                                                                                           |
| 82175882     | Granted   | 6929207       | 11/3/2003   | 38580      | 10/699721          | US | Tape Cartridge                                                                                                                                   |
| 82186991     | Granted   | 7480113       | 8/8/2007    | 39833      | 11/835869          | US | Tape Drive Apparatus                                                                                                                             |
| 82190555     | Granted   | 6992857       | 2/2/2004    | 38748      | 10/770746          | US | Weighting Servo Signals For Head Positioning                                                                                                     |
| 82197173     | Granted   | 7349177       | 10/14/2005  | 3/25/2008  | 11/251387          | US | Cartridge Loading Devices                                                                                                                        |
| 82197734     | Granted   | 7307924       | 10/27/2004  | 39427      | 10/974130          | US | Systems And Methods For Cartridge Identification                                                                                                 |
| 82197923     | Granted   | 7078627       | 1/27/2005   | 38916      | 11/044407          | US | Ribbon Cable Having An Offset Rolling Loop                                                                                                       |
| 82199480     | Granted   | 7502198       | 7/21/2006   | 39882      | 11/490037          | US | Tape Deployment Systems And Methods Of Deploying Tape In Digital Data Transfer Apparatus                                                         |
| 82200293     | Granted   | 7301718       | 1/31/2005   | 39413      | 11/047171          | US | Recording Errors In Tape Drives                                                                                                                  |
| 82200296     | Granted   | 7206156       | 7/27/2005   | 39189      | 11/191115          | US | Tape Drive Error Management                                                                                                                      |
| 82201103     | Granted   | 7613975       | 8/31/2005   | 11/3/2009  | 11/217000          | US | Predictive Diagnosis Of A Data Read System                                                                                                       |
| 82202225     | Granted   | 7321478       | 2/23/2006   | 1/22/2008  | 11/359500          | US | Data Transfer Apparatus Head Cleaning                                                                                                            |
| 82216154     | Granted   | 8549297       | 7/26/2006   | 10/1/2013  | 11/494294          | US | Data Transfer Device Library And Key Distribution                                                                                                |
| 82220894     | Granted   | 8432634       | 4/3/2006    | 4/30/2013  | 11/396669          | US | Identifying Error Built Into A Medium                                                                                                            |
| 82223018     | Published |               | 10/28/2006  |            | 11/589544          | US | Methods And Systems For Managing Removable Media                                                                                                 |
| 82225262     | Granted   | D588595       | 3/14/2007   | 3/17/2009  | 29/273816          | US | A NEW DESIGN FOR AN OPERATOR CONTROL PANEL WITH DISPLAY AND TOGGLE BUTTON FOR A STORAGE LIBRARY                                                  |
| 82228013     | Granted   | 8004797       | 4/27/2007   | 8/23/2011  | 11/796673          | US | Tape Drive with a Clamping Mechanism Coupled to a Flexible Circuit                                                                               |
| 82231196     | Granted   | 7697230       | 7/17/2007   | 4/13/2010  | 11/879353          | US | TAPE DRIVE POSITION CONTROL                                                                                                                      |



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| 82232324     | Granted   | 7913076       | 12/18/2007  | 3/22/2011  | 11/958802          | US | Method For Changing The Configuration Of A Media Drive Apparatus, Computer Readable Medium, And Media Drive Apparatus |
| 82240439     | Granted   | 8341429       | 9/28/2008   | 12/25/2012 | 12/239806          | US | Data Transfer Device                                                                                                  |
| 82246676     | Published |               | 1/6/2009    |            | 12/349007          | US | Data Processing Apparatus                                                                                             |
| 82247426     | Granted   | 8149977       | 1/28/2009   | 4/3/2012   | 12/361012          | US | Recovering Data Samples                                                                                               |
| 82261229     | Allowed   |               | 3/21/2010   |            | 12/728249          | US | DETERMINING IMPACT OF VIRTUAL STORAGE BACKUP JOBS                                                                     |
| 82643432     | Granted   | 8060900       | 2/15/2011   | 11/15/2011 | 13/027431          | US | Data Storage Means                                                                                                    |
| 82846964     | Granted   | 8670200       | 2/23/2012   | 3/11/2014  | 13/403119          | US | SERVO PATTERN READ-BACK SIGNAL PROCESSING FOR STORAGE DEVICES                                                         |
| 82901628     | Granted   | 8896958       | 1/19/2012   | 11/25/2014 | 13/353442          | US | TAPE WIDTH MEASUREMENTS                                                                                               |
| 83097978     | Published |               | 11/2/2012   |            | 13/667421          | US | Tape Storage Device Having At Least One Redundant Read Data Element                                                   |
| 83137849     | Granted   | 8549237       | 11/27/2012  | 10/1/2013  | 13/686026          | US | METHOD AND APPARATUS FOR USE IN DATA TRANSFER                                                                         |
| 83261925     | Granted   | 6715033       | 10/21/2002  | 3/30/2004  | 10/274104          | US | METHOD OF AND APPARATUS FOR TRACKING APPENDED DATA ON STORAGE MEDIUM                                                  |
| 81982970     | Granted   | 8392586       | 5/15/2001   | 3/5/2013   | 09/858080          | US | Method And Apparatus To Manage Transactions At A Network Storage Device                                               |
| 82099337     | Granted   | 7509589       | 9/30/2003   | 3/24/2009  | 10/673834          | US | Storage Domain GUI                                                                                                    |
| 82232756     | Granted   | 7730218       | 7/31/2007   | 6/1/2010   | 11/888596          | US | METHOD AND SYSTEM FOR CONFIGURATION AND MANAGEMENT OF CLIENT ACCESS TO NETWORK-ATTACHED-STORAGE                       |
| 82232759     | Granted   | 8898682       | 10/19/2007  | 11/25/2014 | 11/875556          | US | Cooling In High-density Storage Systems                                                                               |
| 82245557     | Granted   | 8560524       | 10/30/2008  | 10/15/2013 | 12/261064          | US | Allocating Priorities To Prevent Deadlocks In A Storage System                                                        |
| 82261541     | Granted   | 6782389       | 9/11/2001   | 8/24/2004  | 09/950555          | US | DISTRIBUTING FILES ACROSS MULTIPLE, PERMISSIBLY HETEROGENEOUS, STORAGE DEVICES                                        |
| 82261604     | Granted   | 7890529       | 2/16/2007   | 2/15/2011  | 11/676136          | US | Delegations And Caching In A Distributed Segmented File System                                                        |
| 82262036     | Granted   | 8849880       | 5/18/2011   | 9/30/2014  | 13/110424          | US | PROVIDING VIRTUAL FILES TO STORE METADATA                                                                             |
| 82929208     | Published |               | 4/30/2012   |            | 13/460624          | US | DURABLY RECORDING EVENTS FOR PERFORMING FILE SYSTEM OPERATIONS                                                        |
| 81976415     | Granted   | 6757849       | 8/3/2001    | 6/29/2004  | 09/922541          | US | System And Method For Developing Customized Integration Tests And Network Peripheral Device Evaluations               |
| 81986336     | Granted   | 7016056       | 12/16/2000  | 3/21/2006  | 09/738716          | US | Authoring Tool For Bayesian Network Diagnostic Systems                                                                |
| 81988397     | Granted   | 6820221       | 4/13/2001   | 11/16/2004 | 09/833650          | US | System And Method For Detecting Process And Network Failures In A Distributed System                                  |

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| 81988400     | Granted   | 6782489       | 4/13/2001   | 8/24/2004  | 09/833771          | US | System And Method For Detecting Process And Network Failures In A Distributed System Having Multiple Independent Networks              |
| 81988403     | Granted   | 6782496       | 4/13/2001   | 8/24/2004  | 09/833572          | US | Adaptive Heartbeats                                                                                                                    |
| 81990020     | Granted   | 7076539       | 7/30/2001   | 7/11/2006  | 09/918418          | US | Network Connectivity Establishment At User Log-in                                                                                      |
| 81992957     | Granted   | 6836750       | 4/23/2001   | 12/28/2004 | 09/840784          | US | Systems And Methods For Providing An Automated Diagnostic Audit For Cluster Computer Systems                                           |
| 81997514     | Granted   | 6593862       | 3/28/2002   | 7/15/2003  | 10/109426          | US | METHOD FOR LOSSILY COMPRESSING TIME SERIES DATA                                                                                        |
| 82003574     | Granted   | 7040826       | 1/31/2003   | 5/9/2006   | 10/356777          | US | Imaging Devices And Related Cleaning Means                                                                                             |
| 82032848     | Granted   | 6211877       | 7/20/1998   | 4/3/2001   | 09/119369          | US | Method For Communicating Between Programming Languages                                                                                 |
|              |           |               |             |            |                    |    | Controlled Frames And CGI/HTML Controlled Frames Within The Same Browser Window                                                        |
| 82035098     | Granted   | 6148402       | 4/1/1998    | 11/14/2000 | 09/053571          | US | Apparatus And Method For Remotely Executing Commands Using Distributed Computing Environment Remote Procedure Calls                    |
| 82060073     | Granted   | 7603450       | 4/26/2002   | 10/13/2009 | 10/132418          | US | METHODS AND APPLETS FOR PROVIDING AND CONTRIBUTING TO AN IT NETWORK MANAGEMENT SERVICE                                                 |
|              |           |               |             |            |                    |    |                                                                                                                                        |
| 82061381     | Granted   | 6757709       | 4/5/2000    | 6/29/2004  | 09/543182          | US | Method And Apparatus For Providing A Client System With Information Via A Network                                                      |
| 82072307     | Granted   | 6662316       | 2/23/2000   | 12/9/2003  | 09/511342          | US | Electronic Apparatus Having Improved Diagnostic Interface                                                                              |
| 82072310     | Granted   | 6963998       | 9/10/2003   | 11/8/2005  | 10/659851          | US | Electronic Apparatus Having Improved Diagnostic Interface                                                                              |
| 82088225     | Granted   | 6907356       | 10/10/2002  | 6/14/2005  | 10/268516          | US | Encoder Strip Damage Detector                                                                                                          |
| 82088228     | Granted   | 7056041       | 12/7/2004   | 6/6/2006   | 11/007541          | US | Encoder Strip Damage Detector                                                                                                          |
| 82088291     | Granted   | 7143415       | 8/22/2002   | 11/28/2006 | 10/226514          | US | METHOD FOR USING SELF-HELP TECHNOLOGY TO DELIVER REMOTE ENTERPRISE SUPPORT                                                             |
| 82090349     | Granted   | 7325170       | 3/19/2004   | 1/29/2008  | 10/804290          | US | Method And System For Providing Information For Remote Device Support                                                                  |
| 82096157     | Granted   | 7482536       | 7/30/2003   | 1/27/2009  | 10/629703          | US | Underfloor Cable Junction Unit And Computer Center Equipped With Such Junction Units                                                   |
| 82171016     | Granted   | 7403566       | 6/3/2003    | 7/22/2008  | 10/453044          | US | SYSTEM, COMPUTER PROGRAM PRODUCT, AND METHOD FOR TRANSMITTING COMPRESSED SCREEN IMAGES FROM ONE COMPUTER TO ANOTHER OR MANY COMPUTERS. |
| 82178564     | Allowed   |               | 6/7/2005    |            | 11/147770          | US | System And Method For Enabling Electronic Presentations                                                                                |
| 82189244     | Granted   | 8266272       | 11/7/2005   | 9/11/2012  | 11/267287          | US | Methods For IT Network Representation And Associated Computer Program Products                                                         |
| 82192424     | Published |               | 3/27/2006   |            | 11/389503          | US | Communication System And Method                                                                                                        |
| 82192430     | Granted   | 7633928       | 3/27/2006   | 12/15/2009 | 11/389307          | US | COMMUNICATION DATA METHOD AND SYSTEM FOR VOICE APPLICATIONS EXECUTABLE BY USER EQUIPMENT.                                              |

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| 82210841     | Granted   | 8082509       | 4/22/2005   | 12/20/2011 | 11/112136          | US | SYSTEMS AND METHODS FOR PROVIDING IMMEDIATE ACCESS TO VIRTUAL COLLABORATION FACILITIES                                  |
| 82930390     | Published |               | 10/8/2010   |            | 13/387449          | US | METHOD AND SYSTEM FOR PRINTING                                                                                          |
| 83137892     | Published |               | 7/12/2010   |            | 13/703911          | US | FLEXIBLE DATA CENTER AND METHODS FOR DEPLOYMENT                                                                         |
| 83209064     | Published |               | 4/29/2013   |            | 13/872484          | US | Large-Scale Data Transfer                                                                                               |
| 82092722     | Granted   | 8620777       | 11/19/2001  | 12/31/2013 | 10/495635          | US | Methods, Software Modules And Software Application For Logging Transaction-tax Related Transactions                     |
| 81993143     | Granted   | 8103605       | 4/12/2002   | 1/24/2012  | 10/121268          | US | Customs Information System With Selective Transaction Audit                                                             |
| 83204593     | Published |               | 5/24/2013   |            | 13/902401          | US | CENTRALIZED VERSATILE TRANSACTION VERIFICATION                                                                          |
| 82165079     | Granted   | 5995080       | 6/21/1996   | 11/30/1999 | 08/668199          | US | METHOD AND APPARATUS FOR INTERLEAVING AND DE-INTERLEAVING YUV PIXEL DATA                                                |
| 82165205     | Granted   | 5790753       | 1/22/1996   | 8/4/1998   | 08/589294          | US | SYSTEM FOR DOWNLOADING COMPUTER SOFTWARE PROGRAMS                                                                       |
| 82165208     | Granted   | 5877930       | 3/27/1997   | 3/2/1999   | 08/833014          | US | INPUT AND OUTPUT NOISE REDUCTION CIRCUIT                                                                                |
| 82165334     | Granted   | 5953538       | 11/12/1996  | 9/14/1999  | 08/748145          | US | METHOD AND APPARATUS PROVIDING DMA TRANSFERS BETWEEN DEVICES COUPLED TO DIFFERENT HOST BUS BRIDGES                      |
| 82166081     | Granted   | 6961825       | 1/24/2001   | 11/1/2005  | 09/768418          | US | Cache Coherency Mechanism Using Arbitration Masks                                                                       |
| 82178819     | Granted   | 7590872       | 9/17/2004   | 9/15/2009  | 10/944123          | US | Hot Swappable Power Supply Device And Method Of Operation                                                               |
| 82180502     | Published |               | 4/24/2006   |            | 11/409649          | US | System And Method For Clearing Information In A Stalled Output Queue Of A Crossbar                                      |
| 82180811     | Granted   | 7817432       | 3/6/2008    | 10/19/2010 | 12/043490          | US | Communicating With An Electronic Module That Is Slidably Mounted In A System                                            |
| 82183871     | Granted   | 7428655       | 9/8/2004    | 9/23/2008  | 10/936256          | US | Smart Card For High-availability Clustering                                                                             |
| 82184687     | Granted   | 7282640       | 3/23/2004   | 10/16/2007 | 10/807628          | US | Electronic Device Housing And Systems And Methods For Forming Same                                                      |
| 82188992     | Granted   | 7298612       | 10/25/2005  | 11/20/2007 | 11/259467          | US | Server With Vertical Drive Arrangement                                                                                  |
| 82189181     | Granted   | 7725212       | 10/21/2005  | 5/25/2010  | 11/255819          | US | DATACENTER WITH AUTOMATED ROBOTIC MAINTENANCE                                                                           |
| 82192118     | Granted   | 7436674       | 4/12/2005   | 10/14/2008 | 11/104252          | US | Electronic Device Display Panel                                                                                         |
| 82203848     | Granted   | 7613937       | 10/31/2005  | 11/3/2009  | 11/263433          | US | Method And Apparatus For Utilizing A Microcontroller To Provide An Automatic Order And Timing Power And Reset Sequencer |
| 82210592     | Granted   | 7558075       | 3/27/2006   | 40001      | 11/389787          | US | Accessing An Interior Of An Electronic System                                                                           |
| 82211408     | Granted   | 7594143       | 10/31/2006  | 9/22/2009  | 11/590318          | US | Analysis Engine For Analyzing A Computer System Condition                                                               |
| 82215842     | Granted   | 7420816       | 9/15/2006   | 9/2/2008   | 11/532312          | US | Apparatus And Method For Installing An Electrical Support Structure                                                     |
| 82220018     | Granted   | 7686229       | 3/27/2006   | 3/30/2010  | 11/389750          | US | RFID Reader Device Having Closely Packed Antennas                                                                       |

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| 82220831     | Granted   | 6747878       | 7/20/2000   | 6/8/2004   | 09/620108 US       | US | Data I/O Management System And Method                                                                                      |
| 82222640     | Granted   | 7694091       | 10/23/2006  | 4/6/2010   | 11/585007 US       | US | NON-VOLATILE STORAGE FOR BACKING UP VOLATILE STORAGE                                                                       |
| 82224638     | Granted   | 7424630       | 10/31/2006  | 39700      | 11/590316 US       | US | MULTIPROCESSOR SYSTEM WITH SELECTIVE PROCESSOR POWER DOWN OF CORE AND INTER-PROCESSOR COMMUNICATIONS PORTS                 |
| 82224644     | Granted   | 8649180       | 1/22/2007   | 2/11/2014  | 11/656170 US       | US | System And Method For Tool-less Mounting Of A Bezel With An Electronic Device                                              |
| 82227572     | Granted   | 7623356       | 4/25/2007   | 40141      | 11/789601 US       | US | System And Method To Conjoin Blade Modules                                                                                 |
| 82228262     | Granted   | 7876580       | 7/31/2007   | 1/25/2011  | 11/831016 US       | US | Rotating Cable Strain Relief                                                                                               |
| 82234634     | Granted   | 8670971       | 7/31/2007   | 3/11/2014  | 11/831556 US       | US | Datacenter Workload Evaluation                                                                                             |
| 82236314     | Granted   | 8200903       | 8/20/2008   | 6/12/2012  | 12/194687 US       | US | Computer Cache System With Stratified Replacement                                                                          |
| 82237688     | Granted   | 7551039       | 10/19/2007  | 39987      | 11/875497 US       | US | PHASE ADJUSTMENT IN PHASE-LOCKED LOOPS USING MULTIPLE OSCILLATOR SIGNALS                                                   |
| 82237874     | Granted   | 7619484       | 10/19/2007  | 11/17/2009 | 11/875421 US       | US | Oscillator Phase Matching                                                                                                  |
| 82240685     | Published |               | 3/25/2008   |            | 12/933833 US       | US | Locking Mechanism With Movable And Fixed Members Each Having Single And Double Locking Features                            |
| 82260539     | Granted   | 8239539       | 12/16/2009  | 8/7/2012   | 12/639360 US       | US | MANAGEMENT PROCESSORS COOPERATING TO CONTROL PARTITION RESOURCES                                                           |
| 82261535     | Granted   | D629807       | 3/19/2010   | 12/28/2010 | 29/357986 US       | US | Computer Having A Front Bezel                                                                                              |
| 82554430     | Granted   | 8924597       | 6/20/2008   | 12/30/2014 | 12/997138 US       | US | DOMAIN MANAGEMENT PROCESSOR                                                                                                |
| 82846958     | Granted   | D673959       | 10/13/2011  | 1/8/2013   | 29/404002 US       | US | Cover Plate for A Computing Device                                                                                         |
| 82868581     | Granted   | D678295       | 12/7/2011   | 3/19/2013  | 29/408108 US       | US | A Security Bezel for a Computing Device                                                                                    |
| 82894243     | Granted   | 9148974       | 12/20/2011  | 9/29/2015  | 13/331940 US       | US | SERIAL CONNECTION RISER CARDS INCLUDING PARALLEL CONNECTION MEMORY MODULES (as amended)                                    |
| 82906188     | Granted   | 8806147       | 12/28/2011  | 8/12/2014  | 13/338781 US       | US | System And Method For Creating Ordering Points                                                                             |
| 82961860     | Published |               | 9/27/2012   |            | 13/628791 US       | US | FAULT-TOLERANT POWER CONTROL IN A COMPUTER SYSTEM                                                                          |
| 82962690     | Granted   | 8923000       | 4/30/2012   | 42003      | 13/459915 US       | US | SERVER CHASSIS                                                                                                             |
| 83140972     | Granted   | D711387       | 1/4/2013    | 8/19/2014  | 29/441455 US       | US | BEZEL FOR A TOP LOADING SERVER CARTRIDGE                                                                                   |
| 83197623     | Granted   | 9060436       | 10/28/2010  | 6/16/2015  | 13/822702 US       | US | LAND GRID ARRAY SOCKET ASSEMBLY                                                                                            |
| 83197703     | Published |               | 10/29/2010  |            | 13/824457 US       | US | COMPUTER SYSTEM FABRIC SWITCH HAVING A BLIND ROUTE                                                                         |
| 83527489     | Allowed   |               | 8/26/2013   |            | 29/465274 US       | US | Door Design for the FlexRack SL-Server Rack Solution                                                                       |
| 83539623     | Published |               | 4/12/2011   |            | 14/005244 US       | US | DATA AND DIGITAL CONTROL COMMUNICATION OVER POWER                                                                          |
| 83693683     | Published |               | 6/30/2011   |            | 14/123091 US       | US | A MEMORY MODULE THAT INCLUDES A MEMORY MODULE COPY ENGINE FOR COPYING DATA FROM AN ACTIVE MEMORY DIE TO A SPARE MEMORY DIE |

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| 83987030     | Published   |               | 1/31/2012   |            | 14/370962          | US | MEMORY MODULE BUFFER DATA STORAGE                                                                                           |
| 84031315     | Application |               | 10/31/2014  |            | 14/530539          | US | SERVER RACK LIFT                                                                                                            |
| 84106340     | Application |               | 5/30/2012   |            | 14/404315          | US | A SOURCE TO PROVIDE A REDUNDANT OUTPUT TO A CONVERTER                                                                       |
|              |             |               |             |            |                    |    |                                                                                                                             |
| 84114824     | Application |               | 1/27/2015   |            | 14/606414          | US | CONFIGURABLE CARD SLOTS                                                                                                     |
| 84191538     | Application |               | 9/3/2015    |            | 29/538432          | US | SERVER MODULE                                                                                                               |
| 84252680     | Application |               | 1/25/2013   |            | 14/760620          | US | QUEUE BUFFER DE-QUEUEING                                                                                                    |
| 84304290     | Application |               | 7/9/2015    |            | 29/532734          | US | MICROSERVER                                                                                                                 |
| 90056906     | To Be Filed |               | 4/3/2013    |            |                    | US | Managing Firmware Updates                                                                                                   |
| 81970856     | Granted     | 6667960       | 4/29/2000   | 12/23/2003 | 09/562594          | US | PROTOCOL FOR IDENTIFYING COMPONENTS IN A POINT-TO-POINT COMPUTER SYSTEM                                                     |
| 81972230     | Granted     | 6775640       | 4/28/2000   | 8/10/2004  | 09/560189          | US | PERFORMANCE ADDER FOR TRACKING OCCURRENCE OF EVENTS WITHIN A CIRCUIT                                                        |
| 81972854     | Granted     | 6788754       | 10/10/2000  | 9/7/2004   | 09/686111          | US | Method And Apparatus For De-Skewing Clock Edges For Systems With Distributed Clocks                                         |
| 82013495     | Granted     | 5757686       | 11/30/1995  | 5/26/1998  | 08/566415          | US | Method Of Decoupling The High Order Portion Of The Addend From The Multiply Result In An FMAC                               |
| 82015868     | Granted     | 5668818       | 8/6/1996    | 9/16/1997  | 08/692736          | US | System And Method For Scan Control Of A Programmable Fuse Circuit In An Integrated Circuit                                  |
| 82019612     | Granted     | 5881224       | 9/10/1996   | 3/9/1999   | 08/711574          | US | Apparatus And Method For Tracking Events In A Microprocessor That Can Retire More Than One Instruction During A Clock Cycle |
| 82022303     | Granted     | 5812830       | 11/14/1996  | 9/22/1998  | 08/749863          | US | Debug System With Raw Mode Trigger Capability                                                                               |
| 82031351     | Granted     | 6163473       | 2/2/2000    | 36879      | 09/496854          | US | Memory For Storing Encoded Mask And Data Bits                                                                               |
| 82084418     | Granted     | 7370232       | 6/16/2006   | 5/6/2008   | 11/454087          | US | Method And Apparatus For Recovery From Loss Of Lock Step                                                                    |
| 82085981     | Granted     | 6847909       | 11/1/2002   | 38377      | 10/285785          | US | System And Method For Generating A SHMOO Plot By Tracking The Edge Of The Passing Region                                    |
| 82098401     | Granted     | 7103756       | 9/30/2002   | 9/5/2006   | 10/261131          | US | Data Processor With Individually Writable Register Subword Locations                                                        |
| 82100528     | Granted     | 8037445       | 8/20/2003   | 10/11/2011 | 10/644625          | US | A System For And Method Of Controlling A VLSI Environment                                                                   |
| 82105268     | Granted     | 7373555       | 5/9/2003    | 39581      | 10/434920          | US | Systems And Methods Controlling Transaction Draining For Error Recovery                                                     |
| 82117322     | Granted     | 6757811       | 5/30/2000   | 38167      | 09/584034          | US | SLACK FETCH TO IMPROVE PERFORMANCE IN A SIMULTANEOUS AND REDUNDANTLY THREADED PROCESSOR                                     |

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| 82118696     | Granted | 7143300       | 7/25/2001   | 39049      | 09/915082          | US | AUTOMATED POWER MANAGEMENT SYSTEM FOR A NETWORK OF COMPUTERS                                                              |
| 82119815     | Granted | 7003648       | 3/28/2002   | 2/21/2006  | 10/109255          | US | FLEXIBLE DEMAND-BASED RESOURCE ALLOCATION FOR MULTIPLE REQUESTORS IN A SIMULTANEOUS MULTI-THREADED CPU                    |
| 82121753     | Granted | 7472283       | 5/30/2002   | 12/30/2008 | 10/158359          | US | METHOD AND APPARATUS FOR SECURED DIGITAL VIDEO AND ACCESS TRACKING                                                        |
| 82127996     | Granted | 5752265       | 6/13/1996   | 35927      | 08/662479          | US | MEMORY ACCESSING IN A MULTI-PROCESSOR SYSTEM USING SNOOPING                                                               |
| 82127999     | Granted | 6141735       | 4/29/1998   | 10/31/2000 | 09/071768          | US | PERFORMING A MEMORY ACCESS CYCLE IN A MULTI-PROCESSOR COMPUTER SYSTEM                                                     |
| 82133615     | Granted | 6848015       | 11/30/2001  | 1/25/2005  | 09/998514          | US | ARBITRATION TECHNIQUE BASED ON PROCESSOR TASK PRIORITY                                                                    |
| 82135301     | Granted | 6260166       | 6/1/1998    | 7/10/2001  | 09/088306          | US | OBSERVABILITY REGISTER ARCHITECTURE FOR EFFICIENT PRODUCTION TEST AND DEBUG                                               |
| 82136297     | Granted | 6098166       | 4/10/1998   | 8/1/2000   | 09/058487          | US | SPECULATIVE ISSUE OF INSTRUCTION UNDER A LOAD MISS SHADOW                                                                 |
| 82165955     | Granted | 6282095       | 4/27/2000   | 8/28/2001  | 09/559195          | US | METHOD AND SYSTEM FOR CONTROLLING RADIO FREQUENCY RADIATION IN MICROELECTRONIC PACKAGES USING HEAT DISSIPATION STRUCTURES |
| 82166078     | Granted | 6675374       | 10/12/1999  | 1/6/2004   | 09/416436          | US | INSERTION OF PREFETCH INSTRUCTIONS INTO COMPUTER PROGRAM CODE                                                             |
| 82166141     | Granted | 6463547       | 12/8/1999   | 37537      | 09/457604          | US | DUAL ON-CHIP AND IN-PACKAGE CLOCK DISTRIBUTION SYSTEM                                                                     |
| 82180442     | Granted | 7739536       | 2/25/2005   | 6/15/2010  | 11/065883          | US | Intelligent Frequency And Voltage Margining                                                                               |
| 82184189     | Granted | 7378598       | 2/19/2004   | 5/27/2008  | 10/782640          | US | Printed Circuit Board Substrate And Method For Constructing Same                                                          |
| 82190432     | Granted | 8392377       | 11/23/2004  | 3/5/2013   | 10/996254          | US | Method For Performing A Fine-grained Undo Operation In An Interactive Editor                                              |
| 82192364     | Granted | 7817849       | 8/18/2005   | 10/19/2010 | 11/206693          | US | Method And Apparatus For Graphical Data Compression                                                                       |
| 82192367     | Granted | 7920744       | 9/7/2010    | 4/5/2011   | 12/876908          | US | Method And Apparatus For Graphical Data Compression                                                                       |
| 82197110     | Granted | 7500056       | 7/21/2004   | 3/3/2009   | 11/089586          | US | System And Method To Facilitate Reset In A Computer System                                                                |
| 82206599     | Granted | 7373565       | 8/23/2005   | 5/13/2008  | 11/209215          | US | Start/stop Circuit For Performance Counter                                                                                |
| 82206788     | Granted | 8091090       | 1/5/2005    | 1/3/2012   | 11/030530          | US | Method For Providing Scratch Registers For Use By A Virtual-machine Monitor                                               |
| 82209785     | Granted | 7757107       | 6/27/2006   | 7/13/2010  | 11/475778          | US | Maintaining A Power Budget                                                                                                |
| 82223708     | Granted | 8219996       | 5/9/2007    | 7/10/2012  | 11/746067          | US | COMPUTER PROCESSOR WITH FAIRNESS MONITOR                                                                                  |
| 82235378     | Granted | 7783823       | 7/31/2007   | 8/24/2010  | 11/831385          | US | HARDWARE DEVICE DATA BUFFER                                                                                               |

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| 82237004     | Granted     | 9032397       | 5/28/2008   | 5/12/2015  | 12/128511          | US | Virtual Machine Migration With Direct Physical Access Control                                                                                                           |
| 82240934     | Granted     | 7518418       | 9/25/2007   | 4/14/2009  | 11/903948          | US | Ratio Granularity Clock Divider Circuit And Method                                                                                                                      |
| 82241687     | Granted     | 8041896       | 4/30/2008   | 10/18/2011 | 12/113076          | US | VIRTUALIZATION PLATFORM WITH DEDICATED CACHE ACCESS                                                                                                                     |
| 82243682     | Granted     | 8423803       | 4/23/2008   | 4/16/2013  | 12/937677          | US | Method And System For Forcing One Or More Power States On A Display                                                                                                     |
| 82249799     | Granted     | 8225048       | 4/29/2009   | 7/17/2012  | 12/432348          | US | Systems And Methods For Resource Access                                                                                                                                 |
| 82562920     | Granted     | 9015454       | 5/2/2008    | 4/21/2015  | 12/988954          | US | Binding Data To Computers Using Cryptographic Co-Processors and Machine-Specific and Platform-Specific Keys (as amended)                                                |
| 82573926     | Published   |               | 1/27/2011   |            | 13/014996          | US | Compatible Operating System                                                                                                                                             |
| 82651092     | Published   |               | 8/22/2008   |            | 13/060199          | US | Remote Graphics Console And Virtual Media Access To Virtual Machine Guests                                                                                              |
| 82827920     | Granted     | 8782466       | 2/3/2012    | 7/15/2014  | 13/366185          | US | MULTIPLE PROCESSING ELEMENTS                                                                                                                                            |
| 82853974     | Granted     | 8782450       | 4/17/2009   | 7/15/2014  | 13/262809          | US | Power Capping System And Method                                                                                                                                         |
| 82911830     | Published   |               | 3/5/2012    |            | 13/412146          | US | DEDUPLICATING A FILE SYSTEM                                                                                                                                             |
| 82928813     | Published   |               | 1/29/2010   |            | 13/384353          | US | Configuration Of Network Links In A Virtual Connection Environment                                                                                                      |
| 83011847     | Granted     | 8964384       | 7/27/2012   | 2/24/2015  | 13/560356          | US | Component Cooling                                                                                                                                                       |
| 83092468     | Granted     | 9011170       | 12/16/2010  | 4/21/2015  | 13/823916          | US | Detachable Lid (as amended)                                                                                                                                             |
| 84060887     | Published   |               | 4/30/2012   |            | 14/387598          | US | HIDDEN CORE TO FETCH DATA                                                                                                                                               |
| 84061757     | Published   |               | 4/30/2012   |            | 14/387887          | US | PROCESSOR PROVIDING MULTIPLE SYSTEM IMAGES                                                                                                                              |
| 84138259     | Application |               | 9/28/2012   |            | 14/419387          | US | SYNCHRONIZING TIMESTAMP COUNTERS                                                                                                                                        |
| 81967613     | Granted     | 6567891       | 3/14/2001   | 5/20/2003  | 09/808648          | US | Methods And Arrangements For Improved Stripe-Based Processing                                                                                                           |
| 81968918     | Granted     | 6782416       | 1/12/2001   | 38223      | 09/760235          | US | Distributed And Geographically Dispersed Quorum Resource Disks                                                                                                          |
| 82044464     | Granted     | 6021909       | 11/13/1998  | 2/8/2000   | 09/191963          | US | Equipment Enclosure Rack Support Rail System                                                                                                                            |
| 82052579     | Granted     | 6647514       | 3/23/2000   | 11/11/2003 | 09/534921          | US | HOST I/O PERFORMANCE AND AVAILABILITY OF A STORAGE ARRAY DURING REBUILD BY PRIORITIZING I/O REQUEST                                                                     |
| 82058945     | Granted     | 8102904       | 9/2/2003    | 1/24/2012  | 10/653568          | US | Methods And Systems For Data Rate Detection For Multi-Speed Embedded Clock Serial Receivers                                                                             |
| 82059260     | Granted     | 7031928       | 10/2/2000   | 38825      | 09/678168          | US | Method And System For Throttling I/O Request Servicing On Behalf Of An I/O Request Generator To Prevent Monopolization Of A Storage Device By The I/O Request Generator |
| 82065749     | Granted     | 7058708       | 6/12/2001   | 38874      | 09/878185          | US | METHOD OF AND APPARATUS FOR MANAGING PREDICTED FUTURE USER ACCOUNTS ASSIGNED TO A COMPUTER                                                                              |
| 82068503     | Granted     | 6772305       | 1/31/2002   | 38202      | 10/060032          | US | Data Reading And Protection                                                                                                                                             |

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| 82080671     | Granted   | 6807605       | 10/3/2002   | 38279      | 10/264915          | US | Managing A Data Storage Array, A Data Storage System, And A RAID Controller                                                            |
| 82080677     | Granted   | 7337269       | 10/3/2002   | 39504      | 10/264573          | US | Method Of Managing A Data Storage Array, And A Computer System Including A RAID Controller                                             |
| 82085165     | Granted   | 7805525       | 4/30/2003   | 40449      | 10/425599          | US | System And Method For Processing Fibre Channel (FC) Layer Service Requests In An FC Network                                            |
| 82090541     | Granted   | 7586944       | 8/30/2002   | 40064      | 10/233230          | US | Method And System For Grouping Clients Of A Storage Area Network According To Priorities For Bandwidth Allocation                      |
| 82099400     | Published |               | 1/28/2004   |            | 10/767356          | US | Transaction-based Storage Operations                                                                                                   |
| 82102148     | Granted   | 7627627       | 4/30/2004   | 40148      | 10/837115          | US | CONTROLLING COMMAND MESSAGE FLOW IN A NETWORK                                                                                          |
| 82105331     | Granted   | 7171531       | 1/14/2004   | 39112      | 10/759772          | US | Process Job Flow Analysis                                                                                                              |
| 82106579     | Granted   | 8639866       | 8/6/2003    | 41667      | 10/636440          | US | Systems And Methods For Dividing A Communications Channel                                                                              |
| 82117505     | Granted   | 6785785       | 1/25/2001   | 38230      | 09/770759          | US | METHOD FOR SUPPORTING MULTI-LEVEL STRIPPING OF NON-HOMOGENEOUS MEMORY TO MAXIMIZE CONCURRENCY                                          |
| 82117508     | Granted   | 7010652       | 8/27/2004   | 3772006    | 10/928046          | US | METHOD FOR SUPPORTING MULTI-LEVEL STRIPPING OF NON-HOMOGENEOUS MEMORY TO MAXIMIZE CONCURRENCY                                          |
| 82119878     | Granted   | 6961838       | 6/1/2001    | 111/2005   | 09/872597          | US | GENERATING UPDATED VIRTUAL DISKS USING DISTRIBUTED MAPPING TABLES ACCESSIBLE BY MAPPING AGENTS AND MANAGED BY A CENTRALIZED CONTROLLER |
| 82119881     | Granted   | 7366868       | 6/10/2005   | 4292008    | 11/149850          | US | GENERATING UPDATED VIRTUAL DISKS USING DISTRIBUTED MAPPING TABLES ACCESSIBLE BY MAPPING AGENTS AND MANAGED BY A CENTRALIZED CONTROLLER |
| 82119884     | Granted   | 7269631       | 6/1/2001    | 911/2007   | 09/872970          | US | Architecture For Parallel Distributed Table Driven I/O Mapping                                                                         |
| 82119941     | Granted   | 6996672       | 3/26/2002   | 2772006    | 10/106865          | US | System And Method For Active-active Data Replication                                                                                   |
| 82119947     | Granted   | 6920511       | 10/19/2001  | 7192005    | 10/086599          | US | Method And Apparatus For Controlling Communications In Data Storage Complexes                                                          |
| 82120130     | Granted   | 6745207       | 6/1/2001    | 61/2004    | 09/872583          | US | SYSTEM AND METHOD FOR MANAGING VIRTUAL STORAGE                                                                                         |
| 82120691     | Granted   | 7028177       | 1/31/2002   | 4112006    | 10/062186          | US | Array Controller ROM Cloning In Redundant Controllers                                                                                  |
| 82120694     | Granted   | 7093043       | 12/27/2001  | 8152006    | 10/034138          | US | Data Array Having Redundancy Messaging Between Array Controllers Over The Host Bus                                                     |
| 82126874     | Granted   | 5809224       | 10/13/1995  | 9151998    | 08/542897          | US | ON-LINE DISK ARRAY RECONFIGURATION                                                                                                     |
| 82133369     | Granted   | 6543004       | 7/29/1999   | 412003     | 09/363512          | US | METHOD AND APPARATUS FOR ARCHIVING AND RESTORING DATA                                                                                  |
| 82133429     | Granted   | 6370616       | 4/4/2000    | 492002     | 09/542760          | US | MEMORY INTERFACE CONTROLLER FOR DATUM RAID OPERATIONS WITH A DATUM MULTIPLIER                                                          |



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| 82133432     | Granted   | 6370611       | 4/4/2000    | 4/9/2002   | 09/542624          | US | Raid XOR operations to synchronous dram using a read buffer and pipelining of synchronous dram burst read data                |
| 82133552     | Granted   | 7467274       | 12/31/2001  | 12/16/2008 | 10/039018          | US | METHOD TO INCREASE THE LIFE SPAN OF LIMITED CYCLE READ/WRITE MEDIA                                                            |
| 82134551     | Granted   | 6018125       | 11/15/1996  | 1/25/2000  | 08/751127          | US | HIGH FREQUENCY EMI SHIELD WITH AIR FLOW FOR ELECTRONIC DEVICE ENCLOSURE                                                       |
| 82165454     | Granted   | 5775418       | 9/20/1996   | 7/7/1998   | 08/717338          | US | T-SHAPED LOCKING MEMBER FOR ENGAGING A PASSAGEWAY IN A HEAT SINK FOR SECUREMENT TO A MOUNTING BOARD                           |
| 82172510     | Granted   | 7990849       | 2/1/2005    | 8/2/2011   | 11/048523          | US | Automated Recovery From A Split Segment Condition In A Layer2 Network For Teamed Network Resources Of A Computer System       |
| 82193300     | Granted   | 7305530       | 11/2/2004   | 12/4/2007  | 10/979716          | US | Copy Operations In Storage Networks                                                                                           |
| 82194986     | Granted   | 8549226       | 5/14/2004   | 10/1/2013  | 10/846455          | US | Providing An Alternative Caching Scheme At The Storage Area Network Level                                                     |
| 82195550     | Granted   | 7272012       | 9/30/2004   | 9/18/2007  | 10/954685          | US | Removable Storage Modules                                                                                                     |
| 82198610     | Granted   | 8121051       | 2/26/2007   | 2/21/2012  | 11/711260          | US | Network Resource Teaming On A Per Virtual Network Basis                                                                       |
| 82201352     | Granted   | 7472307       | 11/2/2004   | 12/30/2008 | 10/979730          | US | Recovery Operations In Storage Networks                                                                                       |
| 82201607     | Published |               | 7/26/2006   |            | 11/493425          | US | A Method And Apparatus For Transferring Data Between Databases                                                                |
| 82204478     | Granted   | 7831750       | 1/29/2008   | 11/9/2010  | 12/022035          | US | METHOD, APPARATUS AND SOFTWARE FOR PROCESSING INPUT OR OUTPUT REQUESTS FOR A MIRRORED STORAGE VOLUME                          |
| 82207469     | Granted   | 8688904       | 5/23/2005   | 4/1/2014   | 11/136593          | US | A Method For Managing Data Storage                                                                                            |
| 82209161     | Granted   | 8650268       | 8/17/2005   | 2/11/2014  | 11/205709          | US | Remotely Associating Network Ports To A Server                                                                                |
| 82211219     | Granted   | 8903766       | 10/31/2005  | 12/2/2014  | 11/264571          | US | Data Mirroring Using A Virtual Connection                                                                                     |
| 82213838     | Granted   | 7721053       | 10/24/2005  | 5/18/2010  | 11/256912          | US | Intelligent Logical Unit Provisioning                                                                                         |
| 82215089     | Granted   | 8369212       | 8/29/2006   | 2/5/2013   | 11/512460          | US | Network Path Validation Based On User-specified Criteria                                                                      |
| 82217648     | Granted   | 8145941       | 10/31/2006  | 3/27/2012  | 11/590958          | US | Detection And Correction Of Block-level Data Corruption In Fault-Tolerant Data-Storage Systems                                |
| 82218587     | Granted   | 8370416       | 4/26/2006   | 2/5/2013   | 11/411732          | US | Compatibility Enforcement In Clustered Computing Systems AFFECTING A CACHING ALGORITHM USED BY A CACHE OF A STORAGE SYSTEM    |
| 82219019     | Granted   | 7725654       | 7/25/2006   | 5/25/2010  | 11/492350          | US | Managing Assets Using At Least One Policy And Asset Locations                                                                 |
| 82220024     | Published |               | 3/27/2006   |            | 11/389785          | US |                                                                                                                               |
| 82225019     | Granted   | 7797468       | 10/31/2006  | 9/14/2010  | 11/590957          | US | Method And System For Achieving Fair Command Processing In Storage Systems That Implement Command-associated Priority Queuing |
| 82226204     | Granted   | 8395896       | 2/24/2007   | 3/12/2013  | 11/678590          | US | Redundant Cooling Systems And Methods                                                                                         |

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| 82227641     | Granted   | 8874841       | 4/30/2007   | 10/28/2014 | 11/799307          | US | Method And System For Distributing Snapshots Across Any<br>Of Any Array Cluster                                                                      |
| 82230257     | Granted   | 7694079       | 4/4/2007    | 4/6/2010   | 11/732621          | US | TAGGED SEQUENTIAL READ OPERATIONS                                                                                                                    |
| 82237751     | Granted   | 7941578       | 10/1/2008   | 5/10/2011  | 12/243874          | US | Managing Command Request Time-outs In QOS Priority<br>Queues                                                                                         |
| 82238816     | Granted   | 8648568       | 1/17/2008   | 2/11/2014  | 12/812570          | US | Backup Power System Management                                                                                                                       |
| 82249742     | Granted   | 8370688       | 4/22/2010   | 2/5/2013   | 12/765088          | US | IDENTIFYING A STORAGE DEVICE AS FAULTY FOR A FIRST<br>STORAGE VOLUME WITHOUT IDENTIFYING THE STORAGE<br>DEVICE AS FAULTY FOR A SECOND STORAGE VOLUME |
| 82249802     | Granted   | 8001425       | 4/8/2009    | 8/16/2011  | 12/420438          | US | PRESERVING STATE INFORMATION OF A STORAGE<br>SUBSYSTEM IN RESPONSE TO COMMUNICATION LOSS TO THE<br>STORAGE SUBSYSTEM                                 |
| 82261286     | Published |               | 3/19/2010   |            | 12/727998          | US | NON-DISRUPTIVE DISK OWNERSHIP CHANGE IN DISTRIBUTED<br>STORAGE SYSTEMS                                                                               |
| 82578815     | Granted   | 6833995       | 11/21/2001  | 38342      | 09/990121          | US | Enclosure Having a Divider Wall for Removable Electronic<br>Devices                                                                                  |
| 82578878     | Granted   | 7539790       | 11/15/2005  | 39959      | 11/280828          | US | Reducing Latency in SCSI Protocol                                                                                                                    |
| 82578881     | Granted   | 7644300       | 4/20/2007   | 1/5/2010   | 11/738396          | US | Fast Resynchronization of Data from a Remote Copy                                                                                                    |
| 82578921     | Granted   | 8694563       | 4/18/2009   | 4/8/2014   | 12/426224          | US | Space Recovery for Thin-Provisioned Storage Volumes                                                                                                  |
| 82662244     | Granted   | 8667236       | 9/29/2010   | 41702      | 12/893335          | US | HOST BASED WRITE ORDERING FOR ASYNCHRONOUS<br>REPLICATION                                                                                            |
| 82752131     | Granted   | 8909864       | 9/30/2011   | 41982      | 13/250630          | US | MULTICAST WRITE COMMANDS                                                                                                                             |
| 82752151     | Granted   | 8880769       | 11/1/2011   | 11/4/2014  | 13/286334          | US | MANAGEMENT OF TARGET DEVICES                                                                                                                         |
| 82847482     | Published |               | 3/15/2012   |            | 13/421060          | US | BALANCING LOGICAL UNITS IN STORAGE SYSTEMS                                                                                                           |
| 82848209     | Granted   | 9037772       | 1/5/2012    | 42143      | 13/344139          | US | HOST BASED ZONE CONFIGURATION                                                                                                                        |
| 82856493     | Published |               | 10/5/2011   |            | 13/253687          | US | Key-Configured Topology With Connection Management                                                                                                   |
| 82858886     | Published |               | 10/21/2011  |            | 13/278541          | US | Intelligent Cache Management                                                                                                                         |
| 82899693     | Granted   | 9009311       | 7/24/2012   | 4/14/2015  | 13/556994          | US | INITIATOR ZONING IN PROGRESS COMMAND                                                                                                                 |
| 82961980     | Granted   | 8874821       | 4/17/2012   | 10/28/2014 | 13/449091          | US | DETERMINATION OF A ZONED PORTION OF A SERVICE<br>DELIVERY SYSTEM                                                                                     |
| 82962501     | Granted   | 8996783       | 4/29/2012   | 3/31/2015  | 13/459240          | US | Managing Nodes in a Storage System                                                                                                                   |
| 82969955     | Granted   | 8892939       | 11/21/2012  | 11/18/2014 | 13/683765          | US | OPTIMIZING A RAID VOLUME                                                                                                                             |
| 83014449     | Granted   | 8959374       | 7/31/2012   | 2/17/2015  | 13/563122          | US | POWER MANAGEMENT FOR DEVICES IN A DATA STORAGE<br>FABRIC                                                                                             |
| 83014463     | Granted   | 9037924       | 7/26/2012   | 5/19/2015  | 13/558702          | US | Managing Operation Performance                                                                                                                       |
| 83014469     | Granted   | 9069337       | 7/31/2012   | 6/23/2015  | 13/563622          | US | Storage Array Reservation Forwarding                                                                                                                 |
| 83014486     | Granted   | 8898386       | 7/31/2012   | 11/25/2014 | 13/562419          | US | LOGICAL VOLUME GROUP DRIVE CONTROL                                                                                                                   |
| 83038668     | Granted   | 8726044       | 7/31/2012   | 5/13/2014  | 13/562821          | US | Encrypting data on primary storage device and on cache<br>storage device                                                                             |

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| 83038814     | Granted      | 8914576       | 7/30/2012   | 12/16/2014 | 13/561986          | US | BUFFER FOR RAID CONTROLLER WITH DISABLED POST WITH CACHE                                                                                                                 |
| 83095857     | Granted      | 8793406       | 11/16/2012  | 7/29/2014  | 13/679013          | US | SAS SWITCH THAT SUPPORTS BULK DISCOVERY WHEREIN BULK DISCOVERY IS EITHER ON A PUSH BASIS OR PULL BASIS                                                                   |
| 83119999     | Allowed      |               | 6/8/2011    |            | 13/642045          | US | STORAGE CACHING                                                                                                                                                          |
| 83135436     | Published    |               | 11/12/2012  |            | 13/674592          | US | METHOD AND SYSTEM FOR CONFIGURING A STORAGE ARRAY                                                                                                                        |
| 83136939     | Granted      | D699720       | 1/25/2013   | 2/18/2014  | 29/444110          | US | Hard Drive Carrier                                                                                                                                                       |
| 83137603     | Granted      | D683347       | 1/25/2013   | 5/28/2013  | 29/444114          | US | Hard Drive Carrier                                                                                                                                                       |
| 83140769     | Granted      | 9015527       | 1/29/2013   | 4/21/2015  | 13/752646          | US | DATA BACKUP AND RECOVERY                                                                                                                                                 |
| 83931364     | Published    |               | 1/31/2012   |            | 14/356598          | US | DRIVERS AND CONTROLLERS                                                                                                                                                  |
| 83946426     | Application  |               | 3/8/2012    |            | 14/367880          | US | DATA SAMPLING DEDUPLICATION                                                                                                                                              |
| 83946492     | Published    |               | 4/21/2012   |            | 14/368786          | US | COLLABORATIVE CACHING                                                                                                                                                    |
| 84141339     | Application  |               | 12/21/2012  |            | 14/433675          | US | MEMORY MODULE HAVING ERROR CORRECTION LOGIC                                                                                                                              |
| 84223938     | Application  |               | 4/2/2013    |            | 14/765150          | US | SATA INITIATOR ADDRESSING AND STORAGE DEVICE SLICING                                                                                                                     |
| 84224877     | Application  |               | 3/28/2013   |            | 14/647120          | US | COORDINATING REPLICATION OF DATA STORED IN A NON-VOLATILE MEMORY-BASED SYSTEM                                                                                            |
| 90058695     | Acknowledged |               |             |            |                    | US | System And Method For Message Routing In A Network                                                                                                                       |
| 81994952     | Granted      | 7505486       | 11/19/2002  | 3/17/2009  | 10/300444          | US | Degradable Network Data Path Transmission Scheme                                                                                                                         |
| 82042406     | Granted      | 6066964       | 10/6/1998   | 5/23/2000  | 09/167032          | US | DYNAMIC BUS                                                                                                                                                              |
| 82079486     | Granted      | 8363538       | 2/14/2003   | 1/29/2013  | 10/366932          | US | Orthogonal Data Link, And Associated Methods                                                                                                                             |
| 82120757     | Granted      | 6941407       | 9/27/2002   | 9/6/2005   | 10/259215          | US | METHOD AND APPARATUS FOR ORDERING INTERCONNECT TRANSACTIONS IN A COMPUTER SYSTEM                                                                                         |
| 82128245     | Granted      | 6075929       | 5/14/1998   | 6/13/2000  | 08/658496          | US | PREFETCHING DATA IN RESPONSE TO A READ TRANSACTION FOR WHICH THE REQUESTING DEVICE RELINQUISHES CONTROL OF THE DATA BUS WHILE AWAITING DATA REQUESTED IN THE TRANSACTION |
| 82129304     | Granted      | 6125418       | 11/27/1996  | 9/26/2000  | 08/757429          | US | METHOD AND APPARATUS FOR ENABLING A COMPUTER USER TO CONVERT A COMPUTER SYSTEM TO AN INTELLIGENT I/O SYSTEM                                                              |
| 82130930     | Granted      | 6134579       | 1/25/2000   | 10/17/2000 | 08/911842          | US | SEMAPHORE IN SYSTEM I/O SPACE                                                                                                                                            |
| 82132055     | Granted      | 6173341       | 8/26/1998   | 1/9/2001   | 09/140040          | US | SYSTEM AND METHOD FOR CONFIGURING ADAPTERS IN A COMPUTER SYSTEM                                                                                                          |
| 82132988     | Granted      | 6557068       | 12/22/2000  | 4/29/2003  | 09/747422          | US | HIGH SPEED PERIPHERAL INTERCONNECT APPARATUS, METHOD AND SYSTEM                                                                                                          |
| 82132991     | Granted      | 6816934       | 4/28/2003   | 11/9/2004  | 10/424896          | US | High Speed Peripheral Interconnect Apparatus, Method And System                                                                                                          |

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| 82132994     | Granted     | 7099986       | 9/20/2004   | 8/29/2006  | 10/945003          | US | High Speed Peripheral Interconnect Apparatus, Method and System                                                                                                                |
| 82171259     | Granted     | 7676621       | 9/12/2003   | 3/9/2010   | 10/662034          | US | COMMUNICATIONS BUS TRANSCEIVER                                                                                                                                                 |
| 82177754     | Granted     | 8291145       | 8/10/2004   | 10/16/2012 | 10/915174          | US | Method And Apparatus For Setting A Primary Port On A Bridge                                                                                                                    |
| 82180436     | Granted     | 7984219       | 8/8/2005    | 7/19/2011  | 11/199523          | US | Enhanced CPU Rasmus Feature In ISS Servers                                                                                                                                     |
| 82180937     | Granted     | 7606253       | 1/12/2004   | 10/20/2009 | 10/756667          | US | Successful Transactions                                                                                                                                                        |
| 82200419     | Granted     | 7464284       | 3/22/2005   | 12/9/2008  | 11/086027          | US | SYSTEMS AND METHODS FOR DRIVING DATA OVER A BUS WHERE THE SYSTEMS EMPLOY A BUS CLOCK THAT IS DERIVED FROM A SYSTEM CLOCK AND A DATA CLOCK DESIGNED TO LEAD THE BUS CLOCK.      |
| 82225577     | Granted     | 8948166       | 10/30/2006  | 42038      | 11/554294          | US | System Of Implementing Switch Devices In A Server System (as amended)                                                                                                          |
| 82651112     | Granted     | 8732331       | 10/2/2008   | 5/20/2014  | 13/122331          | US | MANAGING LATENCIES IN A MULTIPROCESSOR INTERCONNECT                                                                                                                            |
| 82816579     | Granted     | 8966353       | 10/31/2011  | 2/24/2015  | 13/285293          | US | Receiver With Tap-Coefficient Adjustments                                                                                                                                      |
| 82837160     | Granted     | 8880760       | 4/27/2012   | 11/4/2014  | 13/458678          | US | SELF ORGANIZING HEAP METHOD INCLUDES A PACKET REORDERING METHOD BASED ON PACKET PASSING RULES ONLY REORDERING PACKETS FROM A LOAD/UNLOAD INPUT SIGNAL IS ASSERTED (AS AMENDED) |
| 82866188     | Granted     | 9148384       | 2/10/2012   | 9/29/2015  | 13/370730          | US | POSTED AND UNENCUMBERED QUEUES                                                                                                                                                 |
| 82934011     | Published   |               | 1/11/2010   |            | 13/386632          | US | SYSTEM INCLUDING DRIVER CIRCUIT FOR ELECTRICAL SIGNALING AND OPTICAL SIGNALING                                                                                                 |
| 83543642     | Published   |               | 4/13/2011   |            | 14/009769          | US | INPUT/OUTPUT PROCESSING                                                                                                                                                        |
| 84069692     | Published   |               | 10/31/2014  |            | 14/530175          | US | SYSTEM OF IMPLEMENTING SWITCH DEVICES IN A SERVER SYSTEM (as amended)                                                                                                          |
| 84191329     | Application |               | 2/18/2015   |            | 14/625606          | US | Shared Video Management Subsystem                                                                                                                                              |
| 82245122     | Granted     | 8484705       | 9/5/2008    | 7/9/2013   | 12/205700          | US | System And Method For Installing Authentication Credentials On A Remote Network Device                                                                                         |
| 82616004     | Granted     | 8619585       | 1/13/2011   | 41639      | 13/006131          | US | DETERMINING LINK COSTS                                                                                                                                                         |
| 82962567     | Granted     | 9148400       | 7/3/2012    | 9/29/2015  | 13/541236          | US | AUTOMATIC DETECTION OF AN END NODE BEHIND A PHONE ON A COMPUTER NETWORK                                                                                                        |
| 83100600     | Published   |               | 8/31/2012   |            | 13/600318          | US | PUBLIC KEY GENERATION UTILIZING MEDIA ACCESS CONTROL ADDRESS                                                                                                                   |
| 83629003     | Published   |               | 10/18/2013  |            | 14/058013          | US | NETWORK RESOURCE AUTOMATION MANAGEMENT                                                                                                                                         |
| 81960242     | Granted     | 5787360       | 8/8/1996    | 7/28/1998  | 08/694135          | US | Telecommunications Systems                                                                                                                                                     |
| 82068251     | Granted     | 6665520       | 8/23/2001   | 12/16/2003 | 09/334569          | US | POWER MANAGEMENT METHOD OF AND APPARATUS FOR USE IN A WIRELESS LOCAL AREA NETWORK (LAN)                                                                                        |

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| 82182998     | Granted | 7624009       | 9/2/2004    | 11/24/2009 | 10/933793          | US | Method And System For Producing Variable Length Content Models                                                                                                            |
| 82202912     | Granted | 8375202       | 9/30/2004   | 2/12/2013  | 10/957490          | US | Communications Methods And Appliances                                                                                                                                     |
| 82266845     | Granted | 5875175       | 5/1/1997    | 2/23/1999  | 08/846900          | US | Method And Apparatus For Time-Based Download Content                                                                                                                      |
| 82267157     | Granted | 5903759       | 6/4/1997    | 36291      | 08/868573          | US | Software Performance Analysis using Hardware Analyze                                                                                                                      |
| 82267592     | Granted | 6259691       | 7/24/1998   | 7/10/2001  | 09/122201          | US | SYSTEM AND METHOD FOR EFFICIENTLY TRANSPORTING DUAL-TONE MULTI-FREQUENCY/MULTIPLE FREQUENCY (DTMF/MF) TONES IN A TELEPHONE CONNECTION ON A NETWORK-BASED TELEPHONE SYSTEM |
| 82267844     | Granted | 5901219       | 8/27/1997   | 5/4/1999   | 08/921636          | US | Method For Ring Signal Detection                                                                                                                                          |
| 82268279     | Granted | 6260084       | 5/18/1998   | 7/10/2001  | 09/080484          | US | MODEM APPARATUS COMPRISING AN USB AND SERIAL PORT WHEREIN DATA IS                                                                                                         |
| 82268405     | Granted | 6185624       | 6/20/2000   | 2/6/2001   | 09/018404          | US | METHOD AND SYSTEM FOR CABLE MODEM MANAGEMENT OF A DATA-OVER-CABLE SYSTEM                                                                                                  |
| 82268654     | Granted | 6047047       | 4/29/1998   | 4/4/2000   | 09/069421          | US | TELECOMMUNICATION CONFIGURATIONS FOR TRANSCIVING E-MAIL AND METHODS OF USING SAME                                                                                         |
| 82268903     | Granted | 6675218       | 8/14/1998   | 1/6/2004   | 09/134496          | US | SYSTEM FOR USER-SPACE NETWORK PACKET MODIFICATION                                                                                                                         |
| 82270094     | Granted | 6253265       | 2/29/2000   | 6/26/2001  | 09/516270          | US | Reinitialization Circuit for a Data Communications Interface                                                                                                              |
| 82270151     | Granted | 6570884       | 11/5/1999   | 37768      | 09/434253          | US | Receive Filtering For Communication Interface                                                                                                                             |
| 82270529     | Granted | 6192440       | 2/26/1999   | 2/20/2001  | 09/258501          | US | System And Method For Dynamically Selecting Interrupt Storage Time Threshold Parameters                                                                                   |
| 82270652     | Granted | 6314525       | 10/1/1997   | 37201      | 08/943379          | US | Means For Allowing Two Or More Network Interface Controller Cards To Appear As One Card To An Operating System                                                            |
| 82271093     | Granted | 6130944       | 2/27/1998   | 36809      | 09/031627          | US | MULTI-POSITION TELEPHONE UNIT                                                                                                                                             |
| 82271528     | Granted | 6775268       | 3/3/2000    | 8/10/2004  | 09/518445          | US | METHOD AND SYSTEM FOR MAPPING PACKET SERVICE CATEGORIES TO ASYMMETRIC DIGITAL SUBSCRIBER LINE LATENCY PATHS                                                               |
| 82271843     | Granted | 6650901       | 2/29/2000   | 11/18/2003 | 09/515366          | US | SYSTEM AND METHOD FOR PROVIDING USER-CONFIGURED TELEPHONE SERVICE IN A DATA NETWORK TELEPHONY SYSTEM                                                                      |
| 82272026     | Granted | 6982962       | 4/10/2000   | 1/3/2006   | 09/546887          | US | System and Method for Selecting a Network Access Provider Using A Portable Information Device                                                                             |
| 82272092     | Granted | 6834326       | 3/17/2000   | 12/21/2004 | 09/527904          | US | RAID Method and Device with Network Protocol Between Controller and Storage Devices                                                                                       |
| 82272212     | Granted | 6266376       | 2/4/2000    | 7/24/2001  | 09/499088          | US | System and method for adjusting PCM data frames for robbed bit signaling in a telephone network                                                                           |

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| 82272653     | Granted | 6779047       | 2/20/2001   | 8/17/2004  | 09/790037          | US | SERIAL COMMUNICATION PORT ARBITRATION BETWEEN<br>HOTOSYNC MANAGER AND A WIRELESS CONNECTION<br>MANAGER                                                                  |
| 82273340     | Granted | 6766020       | 2/23/2001   | 7/20/2004  | 09/792826          | US | System and Method for Comfort Noise Generation                                                                                                                          |
| 82273772     | Granted | 7460533       | 11/15/2001  | 12/2/2008  | 10/002832          | US | System and Method for Multi-Casting Announcements                                                                                                                       |
| 82274396     | Granted | 8027333       | 9/5/2008    | 9/27/2011  | 12/204837          | US | Ip-based Enhanced Emergency Services Using Intelligent<br>Client Devices                                                                                                |
| 82274459     | Granted | 7480260       | 5/13/2004   | 1/20/2009  | 10/845382          | US | Method and Apparatus for Implementing a Presence-Based<br>Universal Camp-On Feature in Packet-Based Telephony<br>Systems                                                |
| 82274528     | Granted | 8767974       | 6/15/2005   | 7/1/2014   | 11/153673          | US | System And Method For Generating Comfort Noise                                                                                                                          |
| 82274777     | Granted | 7711744       | 1/18/2006   | 40302      | 11/334136          | US | Simple and Fast Directory Search with Reduced Key-strokes<br>and Reduced Server Calls                                                                                   |
| 82275272     | Granted | 6072830       | 8/9/1996    | 36683      | 08/689519          | US | VIDEO ENCODER/DECODER SYSTEM                                                                                                                                            |
| 82275398     | Granted | 6088334       | 3/13/1997   | 7/11/2000  | 08/816699          | US | SYSTEM AND METHOD FOR DETERMINING END-TO-END<br>CHARACTERISTICS OF A DATA COMMUNICATION CHANNEL                                                                         |
| 82275464     | Granted | 6125343       | 5/29/1997   | 9/26/2000  | 08/865399          | US | SYSTEM AND METHOD FOR SELECTING A LOUDEST SPEAKER<br>BY COMPARING AVERAGE FRAME GAINS                                                                                   |
| 82016933     | Granted | 5727146       | 6/4/1996    | 3/10/1998  | 08/658191          | US | Source Address Security For Both Training And Non-Training<br>Packets                                                                                                   |
| 82018739     | Granted | 5920699       | 11/7/1996   | 36347      | 08/744335          | US | Broadcast Isolation And Level 3 Network Switch                                                                                                                          |
| 82020986     | Granted | 5802319       | 10/23/1996  | 36039      | 08/740047          | US | Method And Apparatus For Employing An Intelligent Agent To<br>Cause A Packet To Be Sent To Update A Bridge's Filtering<br>Database When A Station Is Moved In A Network |
| 82035719     | Granted | 6493318       | 1/11/1999   | 37600      | 09/228890          | US | Cost Propagation Switch Protocols                                                                                                                                       |
| 82035722     | Granted | 6473403       | 1/11/1999   | 37558      | 09/228159          | US | IDENTIFY NEGOTIATION SWITCH PROTOCOLS                                                                                                                                   |
| 82035725     | Granted | 7283476       | 10/1/2002   | 39371      | 10/263394          | US | Identity Negotiation Switch Protocols                                                                                                                                   |
| 82087979     | Granted | 6889295       | 3/5/2002    | 38475      | 10/091760          | US | Re-Ordering Requests For Shared Resources                                                                                                                               |
| 82088039     | Granted | 6668849       | 37323       | 37985      | 10/094527          | US | Check Valve                                                                                                                                                             |
| 82090415     | Granted | 6779092       | 5/15/2002   | 8/17/2004  | 10/146621          | US | REORDERING REQUESTS FOR ACCESS TO SUBDIVIDED<br>RESOURCE                                                                                                                |
| 82169261     | Granted | 7570591       | 8/3/2004    | 8/4/2009   | 10/911312          | US | Method And Apparatus For Negotiating Link Speed And<br>Configuration                                                                                                    |
| 82169264     | Granted | 7467228       | 8/25/2003   | 12/16/2008 | 10/648148          | US | Diversified Host Based Route Selection Metric                                                                                                                           |
| 82169267     | Granted | 8255503       | 1/11/2005   | 8/28/2012  | 11/033244          | US | Method And Apparatus For Communicating Text-based<br>Commands Through A Network                                                                                         |
| 82173632     | Granted | 7738467       | 7/15/2003   | 6/15/2010  | 10/620109          | US | Output Port Based Double Q Tagging                                                                                                                                      |
| 82173947     | Granted | 7506065       | 11/26/2003  | 3/17/2009  | 10/723041          | US | Remote Mirroring Using IP Encapsulation                                                                                                                                 |
| 82186556     | Granted | 7693975       | 3/2/2004    | 4/6/2010   | 10/792325          | US | Network Device Applying Kalman Filter                                                                                                                                   |

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| 82191863     | Granted   | 7843854       | 2/1/2006    | 11/30/2010 | 11/346916          | US | Network Loop Detection Using Known Static Addresses                                            |
| 82191866     | Granted   | 8203941       | 5/28/2004   | 6/19/2012  | 10/856325          | US | Virus/worm Throttle Threshold Settings                                                         |
| 82198922     | Granted   | 8009668       | 8/17/2004   | 8/30/2011  | 10/919760          | US | Method And Apparatus For Router Aggregation                                                    |
| 82204847     | Granted   | 7756124       | 3/23/2005   | 7/13/2010  | 11/088394          | US | Encapsulating Packets For Network Chip Conduit Port                                            |
| 82204853     | Granted   | 7469356       | 2/22/2005   | 12/23/2008 | 11/063274          | US | Signals Crossing Multiple Clock Domains                                                        |
| 82205102     | Granted   | 7672293       | 3/10/2006   | 3/2/2010   | 11/373631          | US | Hardware Throttling Of Network Traffic Sent To A Processor<br>Based On New Address Rates       |
| 82205540     | Granted   | 7571371       | 8/18/2005   | 8/4/2009   | 11/207387          | US | PARALLEL PARITY CHECKING FOR CONTENT ADDRESSABLE MEMORY AND TERNARY CONTENT ADDRESSABLE MEMORY |
|              |           |               |             |            |                    |    |                                                                                                |
| 82206098     | Published |               | 2/11/2005   |            | 11/056990          | US | Switching Mesh With User-configurable Paths                                                    |
| 82206101     | Published |               | 4/30/2007   |            | 11/799403          | US | Stacked Tagging For Broadcasting Through Hierarchy Of Meshes                                   |
| 82214093     | Published |               | 8/30/2005   |            | 11/216240          | US | Method For Prohibiting An Unauthorized Component From Functioning With A Host Device           |
| 82217147     | Granted   | 7657491       | 10/31/2006  | 2/2/2010   | 11/590049          | US | APPLICATION OF FUZZY LOGIC TO RESPONSE AND UNSOLICITED INFORMATION.                            |
| 82217150     | Granted   | 7634682       | 10/30/2006  | 12/15/2009 | 11/590038          | US | Method And System For Monitoring Network Health                                                |
| 82217153     | Granted   | 8149797       | 6/30/2006   | 4/3/2012   | 11/477915          | US | Visualization Of RF Neighbor Correlation In A Single View                                      |
| 82217213     | Published |               | 10/17/2006  |            | 11/582269          | US | In Flight TCP Window Adjustment To Improve Network Performance                                 |
| 82221893     | Published |               | 10/31/2006  |            | 11/591411          | US | Systems And Methods For Managing Event Messages                                                |
| 82230200     | Granted   | 7760530       | 6/4/2007    | 40379      | 11/810072          | US | Content Addressable Memory Address Resolver                                                    |
| 82231256     | Granted   | 7940709       | 4/30/2007   | 40673      | 11/742520          | US | Service Provision At A Network Access Point                                                    |
| 82231259     | Granted   | 8046569       | 4/30/2007   | 40841      | 11/796810          | US | Processing Element Having Dual Control Stores To Minimize Branch Latency                       |
| 82233071     | Granted   | 8132232       | 7/12/2007   | 3/6/2012   | 11/776870          | US | Controlling Access Privileges In A Wireless Domain                                             |
| 82234694     | Granted   | 8510419       | 9/18/2007   | 8/13/2013  | 11/917722          | US | IDENTIFYING A SUBNET ADDRESS RANGE FROM DNS INFORMATION                                        |
| 82241621     | Granted   | 7975052       | 1/29/2009   | 7/5/2011   | 12/361561          | US | METHODS AND SYSTEMS FOR MANAGING NETWORK ACCESS                                                |
| 82241624     | Granted   | 8670332       | 11/7/2008   | 41709      | 12/267514          | US | Systems And Methods For Notifying Users Of A Network Resource Outage                           |
| 82243685     | Allowed   |               | 3/24/2008   |            | 12/079013          | US | System And Method For Securing A Network From Zero-day Vulnerability Exploits                  |
| 82247243     | Granted   | 8095815       | 10/14/2008  | 1/10/2012  | 12/250829          | US | System For Reducing Power Consumption In An Electronic Chip                                    |
| 82248740     | Granted   | 8432912       | 4/22/2010   | 4/30/2013  | 12/765832          | US | Router Packet Filtering And Mapping                                                            |
| 82249112     | Granted   | 8086728       | 3/12/2009   | 12/27/2011 | 12/403209          | US | A Method And Apparatus Of Correlating Power Usage With Data Traffic Flow For A Network Device  |

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| 82249118     | Granted   | 8117321       | 1/26/2009   | 2/14/2012  | 12/359544          | US | Network Connection Management Using Connection Projects                                                                                 |
| 82249736     | Published |               | 4/22/2010   |            | 12/765813          | US | Router Method And System                                                                                                                |
| 82250051     | Granted   | 8825889       | 5/11/2009   | 9/2/2014   | 12/464021          | US | Network Traffic Rate Limiting System And Method                                                                                         |
| 82250111     | Granted   | 8416701       | 4/30/2009   | 4/9/2013   | 12/433779          | US | A System And Method For Updating Forwarding Tables                                                                                      |
| 82251239     | Granted   | 7512379       | 10/27/2005  | 3/31/2009  | 11/259866          | US | Wireless Access Point (AP) Automatic Channel Selection                                                                                  |
| 82258604     | Granted   | 7801490       | 3/17/2004   | 9/21/2010  | 10/803172          | US | INTERFERENCE BASED SCHEDULING USING COGNITIVE RADIOS                                                                                    |
| 82265288     | Granted   | 8654769       | 11/15/2010  | 2/18/2014  | 12/946241          | US | Convergence Of Multicast Traffic In Response To A Topology Change                                                                       |
| 82265906     | Granted   | 5802278       | 1/23/1996   | 9/1/1998   | 08/599473          | US | BRIDGE/ROUTER ARCHITECTURE FOR HIGH PERFORMANCE SCALABLE NETWORKING                                                                     |
| 82265909     | Granted   | 5784582       | 10/28/1996  | 7/21/1998  | 08/738929          | US | Data Processing System Having Memory Controller For Supplying Current Request And Next Request For Access To The Shared Memory Pipeline |
| 82266470     | Granted   | 5994998       | 5/29/1997   | 11/30/1999 | 08/865016          | US | POWER TRANSFER APPARATUS FOR CONCURRENTLY TRANSMITTING DATA AND POWER OVER DATA WIRES                                                   |
| 82266473     | Granted   | 6140911       | 10/12/1999  | 10/31/2000 | 09/416067          | US | POWER TRANSFER APPARATUS FOR CONCURRENTLY TRANSMITTING DATA AND POWER OVER DATA WIRES                                                   |
| 82266533     | Granted   | 5793260       | 4/26/1996   | 8/11/1998  | 08/641101          | US | CURRENT CONTROLLED OSCILLATOR WITH VOLTAGE INDEPENDENT CAPACITANCE                                                                      |
| 82266719     | Granted   | 6208662       | 1/15/1998   | 3/27/2001  | 09/007803          | US | Method For Distributing And Recovering Buffer Memories In An Asynchronous Transfer Mode Edge Device                                     |
| 82266911     | Granted   | 6108345       | 8/4/1999    | 8/22/2000  | 08/865739          | US | CONFIGURABLE WAN/LAN BRIDGE                                                                                                             |
| 82267154     | Granted   | 6052383       | 5/29/1997   | 4/18/2000  | 08/865242          | US | LAN To ATM Backbone switch Module                                                                                                       |
| 82267406     | Granted   | 6182135       | 2/5/1998    | 1/30/2001  | 09/019461          | US | Method For Determining Whether Two Pieces Of Network Equipment Are Directly Connected                                                   |
| 82267658     | Granted   | 5870412       | 12/12/1997  | 2/9/1999   | 08/989483          | US | Forward Error Correction System For Packet Based Real Time Media                                                                        |
| 82267904     | Granted   | 6058500       | 1/20/1998   | 5/2/2000   | 09/009480          | US | HIGH-SPEED SYNDROME CALCULATION                                                                                                         |
| 82267910     | Granted   | 6219815       | 2/18/2000   | 4/17/2001  | 09/506995          | US | High-speed syndrome calculation                                                                                                         |
| 82268033     | Granted   | 6034993       | 11/14/1997  | 3/7/2000   | 08/970836          | US | Method And Apparatus For Adaptively Equalizing A Signal Received From A Remote Transmitter                                              |
| 82268219     | Granted   | 6205149       | 5/25/2000   | 3/20/2001  | 08/927650          | US | Quality Of Service Control Mechanism And Apparatus                                                                                      |
| 82268222     | Granted   | 6185214       | 9/11/1997   | 2/6/2001   | 08/927915          | US | USE OF CODE VECTORS FOR FRAME FORWARDING IN A BRIDGE/ROUTER                                                                             |
| 82268342     | Granted   | 6118785       | 4/7/1998    | 9/12/2000  | 09/056280          | US | Point-To-Point Protocol With A Signaling Channel                                                                                        |
| 82268594     | Granted   | 6275653       | 5/27/1998   | 8/14/2001  | 09/090595          | US | System And Method For Extending Communications Features Using Generic Management Information Base Objects                               |

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|--------------|---------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------|
| 82268777     | Granted | 6182193       | 5/28/1998   | 1/30/2001  | 09/085766          | US | A CACHING SYSTEM USING CACH INDEXES FOR CALL GROUP DATA OF CALL REQUESTS IN ATM NETWORK DEVICES                             |
| 82268840     | Granted | 6262977       | 8/28/1998   | 7/17/2001  | 09/141803          | US | High Availability Spanning Tree With Rapid Reconfiguration                                                                  |
| 82268843     | Granted | 6233074       | 5/18/1998   | 5/15/2001  | 09/080450          | US | Ring Networks Utilizing Wave Division Multiplexing                                                                          |
| 82269032     | Granted | 6721334       | 2/18/1999   | 4/13/2004  | 09/252128          | US | METHOD AND APPARATUS FOR PACKET AGGREGATION IN PACKET-BASED NETWORK                                                         |
| 82269092     | Granted | 6253269       | 12/22/1998  | 6/26/2001  | 09/218330          | US | BUS ARBITER SYSTEM AND METHOD FOR MANAGING COMMUNICATION BUSES                                                              |
| 82269221     | Granted | 6328480       | 11/17/1999  | 12/11/2001 | 09/442237          | US | Connectors For Providing Fibre Optic Connection To Ethernet Devices Having Twisted-Pair Connections                         |
| 82269281     | Granted | 6182125       | 10/13/1998  | 1/30/2001  | 09/170437          | US | METHODS FOR DETERMINING SENDABLE INFORMATION CONTENT BASED ON A DETERMINED NETWORK LATENCY                                  |
| 82269404     | Granted | 6892229       | 9/30/1998   | 5/10/2005  | 09/163817          | US | System and Method for Assigning Dynamic Host Configuration Protocol Parameters in Devices Using Resident Network Interfaces |
| 82269407     | Granted | 6351524       | 1/20/1999   | 2/26/2002  | 09/234187          | US | Toll Saving Method and Apparatus for a Remote access System                                                                 |
| 82269590     | Granted | 6198632       | 11/30/1998  | 3/6/2001   | 09/201642          | US | Slim Media Jack                                                                                                             |
| 82269596     | Granted | 6033240       | 10/30/1998  | 3/7/2000   | 09/183839          | US | RETRACTABLE MEDIA JACK OPERABLE WITH TWO DISCRETE MEDIA CONNECTORS                                                          |
| 82269719     | Granted | 6570848       | 7/14/1999   | 5/27/2003  | 09/353609          | US | System And Method For Congestion Control In Packet-based Communication Networks                                             |
| 82269776     | Granted | 7660408       | 4/28/2000   | 2/9/2010   | 09/560581          | US | ATTENUATION AND TERMINATION CIRCUIT USING IMPEDANCE SYNTHESIS                                                               |
| 82269779     | Granted | 8472614       | 12/22/2009  | 6/25/2013  | 12/644201          | US | Attenuation And Termination Circuit Using Impedance Synthesis                                                               |
| 82269839     | Granted | 6377667       | 3/15/1999   | 4/23/2002  | 09/268610          | US | TELEPHONE LINE-ASSIST POWERED APPARATUS WITH PROGRAMMABLE HOLD CURRENT                                                      |
| 82269905     | Granted | 6611502       | 1/15/1999   | 8/26/2003  | 09/232742          | US | Improved Spanning Tree With Rapid Propagation Of Topology Changes                                                           |
| 82269908     | Granted | 6680917       | 1/28/2003   | 1/20/2004  | 10/352717          | US | SPANNING TREE WITH RAPID PROPAGATION OF TOPOLOGY CHANGES                                                                    |
| 82270031     | Granted | 6771288       | 3/8/2001    | 8/3/2004   | 09/802257          | US | Methods and Apparatus for Updating Information in a Display Containing Fixed and Variable Information                       |
| 82270088     | Granted | 7275113       | 5/27/1999   | 9/25/2007  | 09/322114          | US | DYNAMIC NETWORK ADDRESS CONFIGURATION SYSTEM AND METHOD                                                                     |
| 82270091     | Granted | 6146153       | 3/3/1999    | 11/14/2000 | 09/265000          | US | Adapter Apparatus And Method For Transmitting Electronic Data                                                               |

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| 82270157     | Granted | 6116924       | 5/25/1999   | 9/12/2000  | 09/318166          | US | Electromagnetic Emissions Shielding Structure For Circuit Board Connector Assembly                   |
| 82270904     | Granted | 6785286       | 8/6/1999    | 8/31/2004  | 09/369324          | US | PORT MIRRORING ACROSS A TRUNKED STACK OF MULTIPLE PORT COMMUNICATION DEVICES                         |
| 82271591     | Granted | 6763031       | 11/17/1999  | 7/13/2004  | 09/442238          | US | Network Device Incorporating Selective Compression Of Stored Data Packets                            |
| 82271840     | Granted | 6206267       | 12/30/1999  | 3/27/2001  | 09/475897          | US | FULL COVERAGE THERMAL COUPLE                                                                         |
| 82272152     | Granted | 6807175       | 8/25/2000   | 10/19/2004 | 09/645569          | US | Distributed Multicast Routing In Packet-based Communication Network Devices                          |
| 82272215     | Granted | 6201836       | 1/20/1999   | 3/13/2001  | 09/234451          | US | Method and Apparatus For Combining A Trellis Coding Scheme With A Pre-Coding Scheme For Data Signals |
| 82272218     | Granted | 6760372       | 8/10/2000   | 7/6/2004   | 09/636290          | US | ADAPTIVE SIGNAL PROCESSOR USING AN EYE-DIAGRAM METRIC                                                |
| 82272401     | Granted | 6574414       | 1/8/2001    | 3/7/75     | 09/756088          | US | Light Transmission Apparatus And Method                                                              |
| 82272530     | Granted | 6772349       | 5/3/2000    | 38202      | 09/563548          | US | Detection of an Attack Such as a Pre-Attack on a Computer Network                                    |
| 82272587     | Granted | 7673034       | 8/9/2000    | 40239      | 09/635275          | US | SELF SERVICE DATA INTERFACE                                                                          |
| 82272650     | Granted | 6965577       | 10/24/2000  | 11/15/2005 | 09/694673          | US | IDENTIFYING AN EDGE SWITCH AND PORT TO WHICH A NETWORK USER IS ATTACHED                              |
| 82272716     | Granted | 7143159       | 12/8/2000   | 11/28/2006 | 09/732991          | US | Method For Correlating And Presenting Network Management Data                                        |
| 82272779     | Granted | 6763018       | 11/30/2000  | 7/13/2004  | 09/728282          | US | Distributed Protocol Processing and Packet Forwarding Using Tunneling Protocols                      |
| 82272836     | Granted | 6763348       | 12/8/2000   | 38181      | 09/731855          | US | Method and Apparatus for Searching Databases Employing a Trie Search Structure                       |
| 82273151     | Granted | 7701941       | 3/28/2001   | 40288      | 09/818670          | US | Network Switch With Mutually Coupled Look-up Engine And Network Processor                            |
| 82273154     | Granted | 8194672       | 3/2/2010    | 6/5/2012   | 12/715720          | US | Network Switch With Mutually Coupled Look-up Engine And Network Processor                            |
| 82273337     | Granted | 7016955       | 7/2/2001    | 3/21/2006  | 09/897381          | US | Network Management Apparatus and Method for Processing Events Associated with Device Reboot          |
| 82273709     | Granted | 7350076       | 12/6/2001   | 3/25/2008  | 10/016558          | US | SCHEME FOR DEVICE AND USER AUTHENTICATION WITH KEY DISTRIBUTION IN A WIRELESS NETWORK                |
| 82273835     | Granted | 7143299       | 9/18/2001   | 11/28/2006 | 09/956376          | US | Method For Power Management Of Intelligent Hardware                                                  |
| 82274021     | Granted | 6662119       | 8/2/2002    | 12/9/2003  | 10/211754          | US | Method And Apparatus For Monitoring Connector Degradation                                            |
| 82274273     | Granted | 7362750       | 6/17/2003   | 4/22/2008  | 10/464292          | US | Switch Module Architecture                                                                           |
| 82274336     | Granted | 7403484       | 1/7/2004    | 7/22/2008  | 10/751930          | US | Switching Fabrics And Control Protocols For Them                                                     |
| 82274339     | Granted | 8175086       | 6/17/2008   | 41037      | 12/140326          | US | Switching Fabrics And Control Protocols For Them                                                     |

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| 822/4399     | Granted     | 765/926       | 3/19/2004   | 2/2/2010   | 10/804927          | US | ENABLING NETWORK COMMUNICATION FROM ROLE BASED AUTHENTICATION                                         |
| 822/4402     | Granted     | 8176543       | 12/17/2009  | 5/8/2012   | 12/640195          | US | ENABLING NETWORK COMMUNICATION FROM ROLE BASED AUTHENTICATION                                         |
| 822/4525     | Granted     | 7349335       | 1/11/2005   | 3/25/2008  | 11/032762          | US | Packet Metering In High-speed Network Units                                                           |
| 822/4585     | Granted     | 7746860       | 7/29/2005   | 6/29/2010  | 11/192772          | US | Testing Applications or Devices in Large Networks                                                     |
| 822/4840     | Granted     | 7860236       | 2/1/2007    | 40540      | 11/670316          | US | Method And System For Echo Cancellation In A Network Switch                                           |
| 822/4960     | Granted     | 8085662       | 5/14/2008   | 12/27/2011 | 12/120377          | US | Open Network Connection                                                                               |
| 82607889     | Granted     | 8839013       | 9/30/2011   | 9/16/2014  | 13/249992          | US | Method Of Reducing Power Consumption In A Network                                                     |
| 82689177     | Granted     | 8879571       | 11/1/2011   | 11/4/2014  | 13/286878          | US | DELAYS BASED ON PACKET SIZES                                                                          |
| 82690050     | Granted     | 8689049       | 11/3/2011   | 4/1/2014   | 13/288782          | US | CORRECTIVE ACTIONS BASED ON PROBABILITIES                                                             |
| 82749151     | Allowed     |               | 7/28/2011   |            | 13/192618          | US | FLOW CONTROL IN PACKET PROCESSING SYSTEMS                                                             |
| 82757040     | Granted     | 8902891       | 7/27/2011   | 12/12/2014 | 13/192081          | US | Method of managing broadcasts and multicasts by a network device                                      |
| 82761700     | Granted     | 8508941       | 6/30/2011   | 8/13/2013  | 13/172982          | US | FAN ASSEMBLY WITH FLEX PRINTED CIRCUIT BOARD                                                          |
| 82938863     | Granted     | 8780908       | 10/28/2009  | 7/15/2014  | 13/386973          | US | Method And Apparatus For Tracing A Multicast Flow                                                     |
| 82962521     | Granted     | 9075820       | 7/30/2012   | 7/7/2015   | 13/562050          | US | Distributed File System at Network Switch                                                             |
| 82964731     | Granted     | 8886879       | 4/27/2012   | 11/11/2014 | 13/458345          | US | TCAM ACTION UPDATES                                                                                   |
| 82965375     | Granted     | 9134774       | 4/27/2012   | 9/15/2015  | 13/458869          | US | Sharing Power Between Network Devices                                                                 |
| 83037440     | Published   |               | 5/6/2013    |            | 13/887620          | US | SYSTEM AND METHOD FOR DATA COMMUNICATION USING A CLASSIFIED FLOW TABLE IN OPENFLOW NETWORKS           |
| 83101556     | Published   |               | 10/30/2012  |            | 13/664211          | US | VIRTUAL PRIVATE NETWORK ACCESS CONTROL                                                                |
| 83128778     | Granted     | 8665911       | 11/2/2012   | 3/4/2014   | 13/668001          | US | Signature checking using deterministic finite state machines                                          |
| 83210484     | Application |               | 5/31/2013   |            | 29/456589          | US | POWER CORD KEYING PLUG AND RECEPTACLE                                                                 |
| 83256515     | Published   |               | 5/1/2013    |            | 13/875211          | US | Method and system for selecting a data compression technique for data transfer through a data network |
| 83425457     | Granted     | 9031070       | 2/18/2011   | 5/12/2015  | 13/981936          | US | METHODS FOR CONTROLLING ELECTIONS IN A MULTICAST NETWORK                                              |
| 83793411     | Published   |               | 9/28/2011   |            | 14/239837          | US | IMPLEMENTING A SWITCH FABRIC RESPONSIVE TO AN UNAVAILABLE PATH                                        |
| 83991444     | Published   |               | 4/30/2012   |            | 14/372575          | US | NETWORK ACCESS APPARATUS HAVING A CONTROL MODULE AND A NETWORK ACCESS MODULE                          |
| 84149062     | Published   |               | 7/31/2012   |            | 14/417066          | US | FEATURE ENABLEMENT OR DISABLEMENT BASED ON DISCOVERY MESSAGE                                          |
| 84168578     | Published   |               | 8/21/2012   |            | 14/422348          | US | FLOW CONTROL IN A NETWORK                                                                             |
| 84202776     | Application |               | 4/1/2015    |            | 14/676261          | US | Shared Resource Allocation Control                                                                    |
| 90051596     | Application |               | 3/8/2013    |            | 14/773187          | US | ROUTING A DATA PACKET TO A SHARED SECURITY ENGINE                                                     |

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| 82251296     | Granted     | 8885539       | 1/26/2005   | 11/11/2014 | 10/905922          | US | Configurable Quality Of Service Support Per Virtual Access Point (VAP) In A Wireless LAN (WLAN) Access Device      |
| 82265780     | Granted     | 5990838       | 6/12/1996   | 11/23/1999 | 08/660964          | US | Dual Orthogonal Monopole Antenna System                                                                            |
| 82267718     | Granted     | 6075797       | 10/17/1997  | 6/13/2000  | 08/953757          | US | METHOD AND SYSTEM FOR DETECTING MOBILITY OF A WIRELESS-CAPABLE MODEM TO MINIMIZE DATA TRANSFER RATE RENEGOTIATIONS |
| 82272962     | Granted     | 7002932       | 1/12/2001   | 2/21/2006  | 09/759848          | US | METHOD AND SYSTEM FOR PROVIDING NETWORK CONNECTIVITY AND MOBILITY WHILE ROAMING                                    |
| 82273841     | Granted     | 7085533       | 2/22/2002   | 8/1/2006   | 10/082489          | US | NETWORK WIRELESS ACCESS INTELLIGENT CONCENTRATION SYSTEM AND METHOD                                                |
| 82274210     | Granted     | 6961596       | 4/21/2003   | 11/1/2005  | 10/419638          | US | Modular RF Antenna and Filter System for Dual Radio WLAN Access Points                                             |
| 82676485     | Published   |               | 6/1/2011    |            | 13/150903          | US | INDICATION OF URL PREREQUISITE TO NETWORK COMMUNICATION                                                            |
| 82749114     | Granted     | 9148781       | 7/28/2011   | 9/29/2015  | 13/192681          | US | WIRELESS TRANSMISSION OF DATA PACKETS BASED ON CLIENT ASSOCIATIONS                                                 |
| 82941439     | Published   |               | 1/29/2010   |            | 13/387467          | US | Wireless Network System And Method Configured To Mitigate Co-channel Interference                                  |
| 83207842     | Published   |               | 3/29/2013   |            | 13/853522          | US | POWERING A NETWORK DEVICE WITH CONVERTED ELECTRICAL POWER                                                          |
| 83863458     | Published   |               | 1/6/2012    |            | 14/347286          | US | WIRELESS ACCESS POINT ASSIGNMENT                                                                                   |
| 83991418     | Published   |               | 4/27/2012   |            | 14/372564          | US | OVERLAPPING SUB-CHANNELS IN A NETWORK                                                                              |
| 84017521     | Published   |               | 2/29/2012   |            | 14/377920          | US | CONTROL OF FREQUENCY CHANNEL BETWEEN WIRELESS ACCESS POINTS ACCORDING TO SEQUENCE                                  |
| 84292465     | Application |               | 12/21/2012  |            | 14/654810          | US | Forwarding of Service Requests by a Wireless Controller                                                            |
| 82061885     | Granted     | 7562248       | 2/18/2005   | 7/14/2009  | 11/061022          | US | DATA STORAGE SYSTEM                                                                                                |
| 82233320     | Granted     | 8838541       | 10/25/2007  | 9/16/2014  | 12/671334          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                            |
| 82261355     | Granted     | 8499131       | 4/13/2010   | 7/30/2013  | 12/759174          | US | Capping A Number Of Locations Referred To By Chunk References                                                      |
| 83701134     | Published   |               | 10/14/2011  |            | 14/130955          | US | PERFORMING A REPLICATION OPERATION IN RESPONSE TO MOVEMENT OF A VIRTUAL DATA CONTAINER                             |
| 81969857     | Granted     | 7079346       | 6/14/2001   | 7/18/2006  | 09/881778          | US | Data Storage Methods And Apparatus                                                                                 |
| 81972290     | Granted     | 7506836       | 8/1/2006    | 3/24/2009  | 11/507725          | US | Irregular Surfaced Tape Guide                                                                                      |
| 81977036     | Granted     | 6570740       | 8/21/2000   | 5/27/2003  | 09/643317          | US | Tape Guide With Wear Resistant Coating                                                                             |
| 81978785     | Granted     | 6648428       | 4/18/2001   | 11/18/2003 | 09/837601          | US | Reconfigurable Data Cartridge Import/Export Drawer                                                                 |
| 81994577     | Granted     | 7455375       | 8/23/2001   | 11/25/2008 | 09/938159          | US | Removable Media Storage Method And Device For A Data Storage System                                                |

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| 82006880     | Granted     | 7039796       | 6/4/2002    | 5/2/2006   | 10/161984          | US | METHOD AND SYSTEM OF LOCATING A POSITION IN MEMORY AT WHICH TO STORE INCOMING FIRMWARE IMAGE                            |
| 82015373     | Granted     | 5746464       | 4/30/1996   | 5/5/1998   | 08/640415          | US | Self-Locking Friction Based Robotic Gripper                                                                             |
| 82027670     | Granted     | 6820273       | 6/16/2003   | 11/16/2004 | 10/463485          | US | Imaging Device And Method For Use In An Autochanger                                                                     |
| 82030040     | Granted     | 6229669       | 11/24/1999  | 5/8/2001   | 09/449010          | US | IMPROVED SERVO HEAD DESIGN AND METHOD OF USING THE SAME                                                                 |
| 82030043     | Granted     | 6647613       | 2/22/2001   | 11/18/2003 | 09/791903          | US | METHOD OF MAKING A MAGNETIC WRITE HEAD AND IN PROCESS HEAD STRUCTURES                                                   |
| 82033160     | Granted     | 6101575       | 10/20/1998  | 8/8/2000   | 09/175806          | US | Tape Drive Data Buffering                                                                                               |
| 82037345     | Granted     | 7451461       | 8/9/1999    | 11/11/2008 | 09/371708          | US | Laterally Expandable Modular Data Storage System                                                                        |
| 82040219     | Granted     | 5979813       | 9/30/1998   | 11/9/1999  | 09/164185          | US | Tape Threading Apparatus                                                                                                |
| 82043027     | Granted     | 6499684       | 5/26/1999   | 12/31/2002 | 09/320238          | US | Tape Leader Pin Assembly And Method For Making The Same                                                                 |
| 82255547     | Granted     | 7657898       | 4/4/2003    | 2/2/2010   | 10/407812          | US | System And Method For Customizing Infrastructure Services For Use In Network Services                                   |
| 82255604     | Granted     | 8560364       | 2/14/2003   | 10/15/2013 | 10/368285          | US | Rationalizing A Resource Allocation                                                                                     |
| 82257230     | Published   |               | 7/7/2006    |            | 11/482594          | US | System And Method For Service Oriented Design Process                                                                   |
| 84304270     | Application |               | 5/28/2013   |            | 14/759956          | US | MOBILE AUGMENTED REALITY FOR MANAGING ENCLOSED AREAS                                                                    |
| 82197611     | Granted     | 7677460       | 3/20/2006   | 3/16/2010  | 11/378305          | US | SMARTCARD METHOD AND COMPUTER SYSTEM                                                                                    |
| 82200977     | Granted     | 7636944       | 10/28/2005  | 12/22/2009 | 11/262436          | US | Method And Apparatus For Detecting And Responding To Email Based Propagation Of Malicious Software In A Trusted Network |
| 82254797     | Granted     | 7219236       | 2/26/2003   | 5/15/2007  | 10/373189          | US | Administering a Security System                                                                                         |
| 82256420     | Granted     | 8756682       | 12/20/2004  | 6/17/2014  | 11/019958          | US | METHOD AND SYSTEM FOR NETWORK INTRUSION PREVENTION                                                                      |
| 82256609     | Granted     | 7966375       | 6/28/2004   | 6/21/2011  | 10/878980          | US | SYSTEM AND METHOD FOR RESTRICTING ACCESS TO EMAIL AND ATTACHMENTS                                                       |
| 82256672     | Granted     | 8434152       | 3/19/2009   | 4/30/2013  | 12/407305          | US | SYSTEM AND METHOD FOR RESTRICTING ACCESS TO AN ENTERPRISE NETWORK                                                       |
| 82256984     | Granted     | 7930735       | 3/31/2006   | 4/19/2011  | 11/394905          | US | Service Management Framework                                                                                            |
| 82257539     | Published   |               | 8/1/2008    |            | 12/184732          | US | VERIFYING AN ELECTRONIC DOCUMENT                                                                                        |
| 82259726     | Granted     | 8443427       | 1/27/2010   | 5/14/2013  | 12/694570          | US | METHOD AND APPARATUS FOR CONTROLLING ACCESS TO A NETWORK RESOURCE                                                       |
| 82615045     | Published   |               | 2/24/2011   |            | 13/034364          | US | METHOD AND APPARATUS FOR VERIFYING STORED DATA                                                                          |
| 82739204     | Granted     | 8516064       | 6/21/2011   | 8/20/2013  | 13/165477          | US | SYSTEM AND METHOD FOR RESTRICTING ACCESS TO EMAIL AND ATTACHMENTS                                                       |
| 84049732     | Published   |               | 9/29/2014   |            | 14/500228          | US | Non-invasive Method And System For Automated Administration Of Diverse Security Constrained Servers                     |

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| 81999509     | Granted     | 6813162       | 11/16/2001  | 11/2/2004  | 09/992864          | US | Method And Apparatus For Supporting Circuit Components Having Solder Column Array Interconnects Using Interposed Support Shims |
| 82238066     | Published   |               | 3/6/2008    |            | 12/919153          | US | Prediction Of Systems Location Inside A Data Center By Using Correlation Coefficients                                          |
| 82249298     | Granted     | 7969727       | 4/29/2009   | 6/28/2011  | 12/432199          | US | COOLING                                                                                                                        |
| 82900884     | Published   |               | 7/31/2009   |            | 13/375297          | US | COMMISSIONING OF SENSORS                                                                                                       |
| 8319186      | Published   |               | 5/20/2010   |            | 13/641214          | US | DATA CENTER COOLING                                                                                                            |
| 84141259     | Published   |               | 12/20/2012  |            | 14/431019          | US | MEMORY INSERTION TOOL                                                                                                          |
| 82003256     | Granted     | 7308463       | 6/26/2002   | 12/11/2007 | 10/180284          | US | PROVIDING REQUESTED FILE MAPPING INFORMATION FOR A FILE ON A STORAGE DEVICE                                                    |
| 82169573     | Granted     | 8010757       | 10/10/2003  | 8/30/2011  | 10/684013          | US | Media Vaulting                                                                                                                 |
| 82215530     | Granted     | 8190742       | 4/25/2006   | 5/29/2012  | 11/411386          | US | Distributed Differential Store With Non-distributed Objects And Compression-enhancing Data-object Routing                      |
| 82264973     | Granted     | 8538920       | 8/8/2011    | 9/17/2013  | 13/205022          | US | SYSTEM AND METHOD FOR STORAGE SERVICE                                                                                          |
| 82275959     | Published   |               | 6/16/2011   |            | 13/162234          | US | PERFORMANCE ANALYZER FOR SELF-TUNING SYSTEM CONTROLLER                                                                         |
| 82915511     | Published   |               | 7/19/2012   |            | 13/553657          | US | INFORMATION MANAGEMENT POLICY BASED ON RELATIVE IMPORTANCE OF A FILE                                                           |
| 83778108     | Published   |               | 8/10/2011   |            | 14/131031          | US | PROVIDING ACCESS TO A CLOUD STORAGE SERVICE ACCORDING TO AN AWARDED CREDIT                                                     |
| 83815051     | Published   |               | 10/18/2011  |            | 14/349132          | US | IMAGE ACQUISITION                                                                                                              |
| 83816837     | Published   |               | 11/2/2011   |            | 14/342734          | US | METHOD OF SEARCHING AND GENERATING A RELEVANT SEARCH STRING                                                                    |
| 83996350     | Application |               | 4/26/2012   |            | 14/375526          | US | INCREASING A DATA TRANSFER RATE                                                                                                |
| 84005387     | Application |               | 8/18/2014   |            | 14/461717          | US | BACKUP AND NON-STAGED RECOVERY OF VIRTUAL ENVIRONMENTS                                                                         |
| 82069934     | Granted     | 8171026       | 4/16/2009   | 5/1/2012   | 12/424801          | US | Method And Vector Analysis For A Document                                                                                      |
| 82110764     | Granted     | 6553392       | 10/14/1999  | 37733      | 09/418425          | US | SYSTEM AND METHOD FOR PURGING DATABASE UPDATE IMAGE FILES AFTER COMPLETION OF ASSOCIATED TRANSACTIONS                          |
| 82116761     | Granted     | 6021405       | 12/11/1996  | 36557      | 08/763407          | US | SYSTEM AND METHOD FOR OPTIMIZING DATABASE QUERIES WITH IMPROVED PERFORMANCE ENHANCEMENTS                                       |
| 82200668     | Granted     | 8892564       | 10/28/2005  | 41961      | 11/261752          | US | INDEXING FOR DATA HAVING INDEXABLE AND NON-INDEXABLE PARENT NODES                                                              |
| 82222079     | Granted     | 8572041       | 9/12/2003   | 41576      | 10/662964          | US | Representing Records                                                                                                           |
| 82241747     | Granted     | 8140961       | 11/21/2007  | 40988      | 11/986593          | US | AUTOMATED RE-ORDERING OF COLUMNS FOR ALIGNMENT TRAP REDUCTION                                                                  |
| 82250672     | Granted     | 8224806       | 7/31/2009   | 41107      | 12/533365          | US | SELECTIVITY-BASED OPTIMIZED-QUERY-PLAN CACHING                                                                                 |

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| 82262102     | Granted     | 8229943       | 8/26/2010   | 7/24/2012  | 12/868895          | US | SYSTEM AND METHOD FOR MODIFYING AN EXECUTING QUERY                                                                                                                                |
| 82263101     | Granted     | 8352620       | 7/27/2010   | 1/8/2013   | 12/843946          | US | DISPLAYING A NETWORK TOPOLOGY MAP WITH A REDUCED NUMBER OF OBJECTS                                                                                                                |
| 82275839     | Granted     | 8930344       | 2/4/2011    | 1/6/2015   | 13/021051          | US | SYSTEMS AND METHODS FOR HOLDING A QUERY                                                                                                                                           |
| 83210544     | Published   |               | 10/25/2010  |            | 13/821213          | US | PROVIDING INFORMATION MANAGEMENT                                                                                                                                                  |
| 83487907     | Published   |               | 3/17/2011   |            | 13/981724          | US | DATA SOURCE ANALYTICS                                                                                                                                                             |
| 84030751     | Application |               | 10/28/2014  |            | 14/526359          | US | QUERY HOTNESS AND SYSTEM HOTNESS METRICS                                                                                                                                          |
| 82038029     | Granted     | 6043816       | 5/29/1998   | 36613      | 09/087583          | US | USER INTERFACE MECHANISM FOR MAINTAINING QUICK ACCESS TO IMPORTANT INFORMATION IN A WINDOWS-BASED COMPUTER ENVIRONMENT                                                            |
| 82051583     | Granted     | 6526504       | 11/18/1999  | 2/25/2003  | 09/442654          | US | SYSTEM AND METHOD FOR SIZING COMPUTER SYSTEMS WITH VARIABLE RAMP-UP PERIODS BY CALCULATING A THROUGHPUT FOR TARGET CONFIGURATION BASED ON DATA OBTAINED FROM A COMPUTER SUBSYSTEM |
|              |             |               |             |            |                    |    |                                                                                                                                                                                   |
| 82208036     | Granted     | 8024303       | 7/29/2005   | 40806      | 11/193815          | US | Software Release Validation                                                                                                                                                       |
| 82227701     | Granted     | 7836175       | 4/15/2008   | 40498      | 12/103319          | US | Apparatus And Method For Processing Management Information                                                                                                                        |
| 82236254     | Granted     | 8352407       | 10/30/2008  | 41282      | 12/261871          | US | Systems And Methods For Modeling Consequences Of Events                                                                                                                           |
| 82964565     | Granted     | 9122383       | 4/16/2012   | 42248      | 13/447788          | US | OBJECT VISUALIZATION                                                                                                                                                              |
| 83097872     | Published   |               | 10/25/2012  |            | 13/660643          | US | DATA SYNCHRONIZATION                                                                                                                                                              |
| 83193793     | Allowed     |               | 9/1/2010    |            | 13/818677          | US | PERFORMING WHAT-IF ANALYSIS                                                                                                                                                       |
| 83584509     | Published   |               | 3/9/2011    |            | 14/001782          | US | PERFORMING A CHANGE PROCESS BASED ON A POLICY                                                                                                                                     |
| 83954381     | Application |               | 9/12/2014   |            | 14/485339          | US | Portfolio Generation Based on a Dynamic Allocation of Resources                                                                                                                   |
| 84072895     | Published   |               | 7/16/2012   |            | 14/391692          | US | WORKFLOW COMPIATION                                                                                                                                                               |
| 84072998     | Published   |               | 7/31/2012   |            | 14/396131          | US | Supporting Multi-Tenancy in a Federated Data Management System                                                                                                                    |
| 84122962     | Published   |               | 2/5/2015    |            | 14/614461          | US | MARKING PROGRAM FILES AS BELONGING TO AN APPLICATION                                                                                                                              |
| 84269657     | Application |               | 7/31/2015   |            | 14/815,307         | US | INFORMATION TECHNOLOGY SERVICE MANAGEMENT RECORDS IN A SERVICE LEVEL TARGET DATABASE TABLE                                                                                        |
| 84312946     | Application |               | 2/28/2013   |            | 14/765099          | US | PROVIDING CODE CHANGE JOB SETS OF DIFFERENT SIZES TO VALIDATORS                                                                                                                   |
| 81956495     | Granted     | 6189038       | 11/18/1999  | 36935      | 09/442787          | US | Generic Notifications Framework System And Method For Enhancing Operation Of A Management Station On A Network                                                                    |

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| 81957122     | Granted   | 6151031       | 9/9/1996    | 11/21/2000 | 08/712229          | US | Map Builder System And Method For Enabling Generic Interfacing Of An Application With A Display Map Generation Process In A Management System                               |
| 81967925     | Granted   | 6778990       | 7/27/2001   | 8/17/2004  | 09/916545          | US | Dynamic Component Activation Method Using A Relationship Database As The Repository For Registration Information                                                            |
| 81982904     | Granted   | 7302478       | 3/2/2001    | 11/27/2007 | 09/796704          | US | System For Self-monitoring Of SNMP Data Collection Processes                                                                                                                |
| 82028858     | Granted   | 6185600       | 12/8/1997   | 2/6/2001   | 08/986601          | US | Universal Viewer/Browser For Network And System Event Using A Universal User Interface Generator, A Generic Product Specification Language, And Product Specific Interfaces |
| 82070000     | Granted   | 6907551       | 10/2/2001   | 6/14/2005  | 09/969898          | US | Fault Notification Method And Related Provider Facility                                                                                                                     |
| 82079738     | Granted   | 7975043       | 2/25/2003   | 7/5/2011   | 10/372440          | US | Method And Apparatus For Monitoring A Network                                                                                                                               |
| 82089101     | Granted   | 8463940       | 1/31/2003   | 6/11/2013  | 10/355002          | US | Method Of Indicating A Path In A Computer Network                                                                                                                           |
| 82182503     | Granted   | 7733800       | 12/10/2004  | 6/8/2010   | 11/008280          | US | Method And Mechanism For Identifying An Unmanaged Switch In A Network                                                                                                       |
| 82186181     | Granted   | 7508773       | 4/6/2005    | 3/24/2009  | 11/099708          | US | METHOD OF ANALYZING THE CAPACITY OF A COMPUTER SYSTEM                                                                                                                       |
| 82196048     | Granted   | 7353378       | 2/18/2005   | 4/1/2008   | 11/061392          | US | Optimizing Computer System                                                                                                                                                  |
| 82203041     | Granted   | 7512841       | 10/22/2004  | 3/31/2009  | 10/972045          | US | Method And System For Network Fault Analysis                                                                                                                                |
| 82216778     | Granted   | 7836026       | 4/19/2007   | 11/16/2010 | 11/785711          | US | METHOD, APPARATUS AND SOFTWARE FOR VERIFYING A PARAMETER VALUE AGAINST A PREDETERMINED THRESHOLD FUNCTION                                                                   |
| 82223264     | Granted   | 6046988       | 2/10/1999   | 4/4/2000   | 09/248010          | US | Method Of Determining The Topology Of A Network Of Objects                                                                                                                  |
| 82244183     | Granted   | 7925666       | 10/6/2006   | 4/12/2011  | 11/544251          | US | System And Method For Managing The Application Of Access Control Lists On Network Devices                                                                                   |
| 82245740     | Published |               | 6/17/2009   |            | 12/486326          | US | MODELING A COMPUTING ENTITY                                                                                                                                                 |
| 82247744     | Granted   | 7944857       | 2/24/2009   | 5/17/2011  | 12/391271          | US | Method And System For Deriving Tunnel Path Information In MPLS Networks                                                                                                     |
| 82264226     | Published |               | 10/18/2010  |            | 12/906460          | US | TRANSACTION CLASSIFICATION RULE GENERATION                                                                                                                                  |
| 82264283     | Published |               | 10/29/2010  |            | 12/916356          | US | SYSTEM AND METHOD FOR DETERMINING TOPOLOGY OF MONITORED ENTITIES                                                                                                            |
| 82264412     | Published |               | 2/28/2011   |            | 13/036466          | US | ESTIMATING BUSINESS SERVICE RESPONSIVENESS                                                                                                                                  |
| 82393855     | Granted   | 8892505       | 12/29/2010  | 11/18/2014 | 12/980348          | US | METHOD FOR SCHEDULING A TASK IN A DATA WAREHOUSE                                                                                                                            |
| 82580985     | Published |               | 2/15/2011   |            | 13/027288          | US | DETECTING NETWORK-APPLICATION SERVICE FAILURES                                                                                                                              |
| 82581543     | Granted   | 8713088       | 3/27/2011   | 4/29/2014  | 13/072724          | US | IDENTIFYING USERS OF REMOTE SESSIONS                                                                                                                                        |
| 82852394     | Granted   | 8468161       | 7/14/2009   | 6/18/2013  | 13/259020          | US | Determining A Seasonal Effect In Temporal Data                                                                                                                              |
| 82911223     | Allowed   |               | 4/30/2012   |            | 13/459265          | US | BACKUP JOBS SCHEDULING OPTIMIZATION                                                                                                                                         |

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| 82963520     | Granted     | 8930773       | 4/16/2012   | 1/6/2015   | 13/447711          | US | DETERMINING ROOT CAUSE                                                                        |
| 82963692     | Published   |               | 4/20/2012   |            | 13/452577          | US | Managing Overlapping Address Domains                                                          |
| 83037480     | Published   |               | 7/30/2012   |            | 13/561592          | US | CAUSATION ISOLATION USING A CONFIGURATION ITEM                                                |
| 83136083     | Published   |               | 6/1/2010    |            | 13/698431          | US | METRIC IDENTIFIED BASED ON EVENT CLASSIFICATION                                               |
| 83199532     | Granted     | 9054954       | 3/13/2013   | 6/9/2015   | 13/800436          | US | Methods, Apparatus, And Articles Of Manufacture To Deploy Software Applications               |
| 83691270     | Application |               | 4/4/2011    |            | 14/008940          | US | DETERMINING FALSE ALARMS IN AN IT APPLICATION (as amended)                                    |
| 83783398     | Published   |               | 7/27/2011   |            | 14/235134          | US | CREATING A CORRELATION RULE DEFINING A RELATIONSHIP BETWEEN EVENT TYPES                       |
| 84164233     | Application |               | 3/18/2013   |            | 14/430809          | US | MAINTAINING AND UTILIZING A REPORT KNOWLEDGEBASE                                              |
| 84312797     | Application |               | 7/9/2015    |            | 14/795335          | US | VISUALIZING CONDITIONS OF INFORMATION TECHNOLOGY ENVIRONMENTS                                 |
| 84312840     | Application |               | 7/31/2015   |            | 14/815,701         | US | DATASET CHART SCALING                                                                         |
| 81982907     | Granted     | 7581167       | 5/17/2001   | 40050      | 09/858634          | US | ISOLATION OF PROBLEMS IN A VIRTUAL ENVIRONMENT                                                |
| 82216277     | Granted     | 8762514       | 10/5/2005   | 41814      | 12/047512          | US | METHOD AND SYSTEM FOR AUTOMATED SIMULATION OF DYNAMIC URL-BASED WEB APPLICATION               |
| 82233254     | Granted     | 6792460       | 1/20/2003   | 9/14/2004  | 10/348203          | US | Load-testing Device And Load-testing Method                                                   |
| 82233257     | Granted     | 7401143       | 3/3/2004    | 7/15/2008  | 10/792145          | US | SYSTEM AND METHODS FOR MONITORING APPLICATION SERVER PERFORMANCE                              |
| 82233260     | Granted     | 7822844       | 3/3/2004    | 10/26/2010 | 10/792150          | US | SYSTEM AND METHODS FOR MONITORING APPLICATION SERVER PERFORMANCE                              |
| 82233569     | Granted     | 6138157       | 10/12/1998  | 10/24/2000 | 09/170130          | US | SYSTEM AND METHODS FOR MONITORING APPLICATION SERVER PERFORMANCE                              |
| 82233572     | Granted     | 6631408       | 8/30/2000   | 37901      | 09/651833          | US | SYSTEM AND METHODS FOR MONITORING APPLICATION SERVER PERFORMANCE                              |
| 82244429     | Allowed     |               | 5/29/2008   |            | 12/937350          | US | METHOD AND APPARATUS FOR TESTING WEB SITES                                                    |
| 82259414     | Granted     | 9104450       | 10/26/2009  | 42227      | 12/605418          | US | TESTING WEB SITES                                                                             |
| 82259417     | Granted     | 8762873       | 10/26/2009  | 41814      | 12/605426          | US | Method And System Of Testing Software Using Real Time Replication                             |
| 82260599     | Published   |               | 4/10/2010   |            | 12/757993          | US | GRAPHICAL USER INTERFACE COMPONENT CLASSIFICATION                                             |
| 82264349     | Granted     | 8572095       | 10/19/2010  | 41576      | 12/907154          | US | GRAPHICAL USER INTERFACE COMPONENT IDENTIFICATION                                             |
| 82580919     | Granted     | 8893074       | 3/11/2011   | 41961      | 13/045766          | US | DETECTING USER INTERFACE DEFECTS IN A SOFTWARE APPLICATION                                    |
| 82581005     | Published   |               | 3/14/2011   |            | 13/047574          | US | ADAPTIVE OBJECT IDENTIFICATION                                                                |
| 82663349     | Granted     | 8862945       | 10/10/2011  | 10/14/2014 | 13/269749          | US | SOFTWARE DEVELOPMENT REQUIREMENTS RECORDING                                                   |
|              |             |               |             |            |                    |    | SCRIPT EXECUTION WITH FALLBACK                                                                |
|              |             |               |             |            |                    |    | SYSTEM AND METHOD FOR MEASURING THE EFFECT OF INTERRUPTIONS ON SOFTWARE APPLICATION USABILITY |

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| 82844173     | Granted     | 8977904       | 2/17/2012   | 3/10/2015  | 13/398888          | US | GENERATING A REPLAYABLE TESTING SCRIPT FOR ITERATIVE USE IN AUTOMATED TESTING UTILITY                                              |
| 82848441     | Granted     | 8683323       | 1/9/2012    | 3/25/2014  | 13/346390          | US | EVALUATION OF DIFFERENCES BETWEEN XML SCHEMAS                                                                                      |
| 82963732     | Granted     | 9043762       | 5/31/2012   | 5/26/2015  | 13/485364          | US | SIMULATED NETWORK                                                                                                                  |
| 82976942     | Published   |               | 6/28/2012   |            | 13/535913          | US | Metadata-based Test Data Generation                                                                                                |
| 83098499     | Published   |               | 9/28/2012   |            | 13/629885          | US | RESPONDING TO NATURAL LANGUAGE QUERIES                                                                                             |
| 83098628     | Published   |               | 2/28/2013   |            | 13/781221          | US | TRANSPORT SCRIPT GENERATION BASED ON A USER INTERFACE SCRIPT                                                                       |
| 83821005     | Application |               | 7/31/2014   |            | 14/448729          | US | FUTURE CLOUD RESOURCE USAGE COST MANAGEMENT                                                                                        |
| 83991607     | Published   |               | 1/26/2012   |            | 14/373815          | US | IMAGE-BASED APPLICATION AUTOMATION                                                                                                 |
| 84290656     | Application |               | 7/1/2015    |            | 14/789455          | US | INJECTION OF DATA INTO A SOFTWARE APPLICATION                                                                                      |
| 90031121     | To Be Filed |               | 4/11/2013   |            |                    | US | AUTOMATED CONTEXTUAL-BASED SOFTWARE LOCALIZATION                                                                                   |
| 90037879     | To Be Filed |               |             |            |                    | US | TEST SESSION SIMILARITY DETERMINATION                                                                                              |
| 82058324     | Granted     | 6738950       | 3/16/2000   | 5/18/2004  | 09/527387          | US | Method And System For Dynamic Generation Of Web Site Content For Specific User Communities From A Single Content Base              |
| 82900177     | Granted     | 8966635       | 2/24/2012   | 2/24/2015  | 13/404572          | US | SOFTWARE MODULE OBJECT ANALYSIS                                                                                                    |
| 83721337     | Allowed     |               | 5/31/2011   |            | 14/115648          | US | AUTOMATED SECURITY TESTING                                                                                                         |
| 84079513     | Published   |               | 7/25/2012   |            | 14/398037          | US | DETERMINING APPLICATION VULNERABILITIES                                                                                            |
| 84312777     | Application |               | 1/29/2013   |            | 14/762939          | US | ANALYZING STRUCTURE OF WEB APPLICATION                                                                                             |
| 82174070     | Granted     | 7870188       | 7/30/2004   | 1/11/2011  | 10/903277          | US | Systems And Methods For Exposing Web Services                                                                                      |
| 82182002     | Granted     | 7552433       | 11/12/2003  | 39987      | 10/704592          | US | Non-platform-specific Unique Identifier Generation                                                                                 |
| 82244243     | Granted     | 8250570       | 2/17/2004   | 41142      | 10/778325          | US | Automated Provisioning Framework For Internet Site Servers                                                                         |
| 82247432     | Granted     | 8275853       | 3/13/2009   | 41177      | 12/403387          | US | Method And System For A Service Intermediary Selection In A Web Service Management System                                          |
| 82258982     | Granted     | 8498959       | 11/28/2009  | 41485      | 12/626882          | US | Policy Enforcement                                                                                                                 |
| 82263227     | Published   |               | 10/20/2010  |            | 12/908685          | US | AUTOMATED SERVICE VERSION UPGRADING                                                                                                |
| 82580853     | Granted     | 7529827       | 12/10/2007  | 39938      | 11/953563          | US | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                                                                 |
| 82580859     | Granted     | 8738753       | 3/16/2009   | 41786      | 12/405109          | US | STANDARD OPERATING PROCEDURE AUTOMATION IN DATABASE ADMINISTRATION                                                                 |
| 82663575     | Granted     | 8935676       | 8/7/2011    | 42017      | 13/204691          | US | AUTOMATED TEST FAILURE TROUBLESHOOTER                                                                                              |
| 82850253     | Granted     | 8739172       | 1/16/2012   | 41786      | 13/350984          | US | GENERATING A VIRTUAL MACHINE PLACEMENT PLAN FOR AN IDENTIFIED SEASONALITY OF SEGMENTS OF AN AGGREGATED RESOURCE USAGE (as amended) |
| 82964622     | Published   |               | 5/23/2012   |            | 13/478723          | US | Managing Virtual Machines In A Cloud Computing System                                                                              |
| 83037526     | Published   |               | 7/30/2012   |            | 13/561857          | US | DATABASE ADAPTER                                                                                                                   |

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| 83141934     | Published    |               | 6/30/2010   |            | 13/703148          | US | SYSTEM AND METHOD FOR SERVICE RECOMMENDATION SERVICE                                          |
| 84071982     | Published    |               | 6/8/2012    |            | 14/391571          | US | VERSION MANAGEMENT FOR APPLICATIONS                                                           |
| 84113828     | Acknowledged |               |             |            |                    | US | EVOLVING OPENSTACK SERVICE MODEL AND POLICY-BASED FULFILLMENT FOR CLOUD BRIDGE                |
| 82021175     | Granted      | 6021492       | 10/9/1996   | 2/1/2000   | 08/728008          | US | Software Metering Management Of Remote Computing Devices                                      |
| 82062506     | Granted      | 8024270       | 5/8/2001    | 9/20/2011  | 10/275871          | US | Operating A Communications Infrastructure On A Pre-payment Basis                              |
| 82062758     | Granted      | 7000019       | 10/16/2001  | 2/14/2006  | 09/977495          | US | Establishment Of A Deferred Network Communication Session                                     |
| 82071059     | Granted      | 708560        | 10/29/2002  | 8/1/2006   | 10/284050          | US | Communication System And Method                                                               |
| 82110329     | Granted      | 6097939       | 7/11/1997   | 8/1/2000   | 08/891556          | US | METHOD AND APPARATUS FOR EVENT DATA MAINTENANCE PER MIN/ESN PAIR IN A MOBILE TELEPHONE SYSTEM |
|              |              |               |             |            |                    |    |                                                                                               |
| 82170326     | Granted      | 8442058       | 4/30/2003   | 5/14/2013  | 10/426350          | US | Locating Stations Between Protocols                                                           |
| 82170329     | Granted      | 7599379       | 4/30/2003   | 10/6/2009  | 10/426673          | US | Registering Stations Between Protocols                                                        |
| 82174073     | Granted      | 7657624       | 6/22/2005   | 2/2/2010   | 11/158784          | US | Network Usage Management System And Method                                                    |
| 82186745     | Granted      | 8045466       | 7/29/2004   | 10/25/2011 | 10/901138          | US | Communication Method And Apparatus                                                            |
| 82187993     | Granted      | 8073120       | 7/1/2005    | 12/6/2011  | 11/632806          | US | Telephone Communications                                                                      |
| 82202165     | Granted      | 8391908       | 11/28/2005  | 41338      | 11/791315          | US | Improvements In Or Relating To Communication Systems                                          |
| 82202231     | Granted      | 8291077       | 1/13/2006   | 10/16/2012 | 11/331858          | US | PROVISION OF SERVICES OVER A COMMON DELIVERY PLATFORM SUCH AS A MOBILE TELEPHONY NETWORK      |
| 82210280     | Granted      | 7949332       | 7/24/2006   | 40687      | 11/491842          | US | Feature Sharing                                                                               |
| 82212842     | Granted      | 8271691       | 5/17/2007   | 41170      | 11/798853          | US | Method For Coupling A Telephone Switched Circuit Network To An Internet Protocol Network      |
| 82217708     | Granted      | 9049029       | 4/28/2006   | 42157      | 11/413550          | US | Providing Different Network Services To A Network Agent                                       |
| 82219961     | Granted      | 7957511       | 5/18/2006   | 6/7/2011   | 11/436363          | US | Providing Network Services To A Network Agent                                                 |
| 82229696     | Granted      | 8326654       | 4/18/2008   | 41247      | 12/105417          | US | Providing A Service To A Service Requester                                                    |
| 82239434     | Published    |               | 3/20/2008   |            | 12/921419          | US | Systems And Methods For Scheduling And Delivering Messages Based On Recipient's Time Zone     |
| 82241186     | Granted      | 8817787       | 1/28/2009   | 8/26/2014  | 12/361204          | US | Data Processing Method And System                                                             |
| 82253732     | Granted      | 9154607       | 8/15/2008   | 42283      | 12/192920          | US | SYSTEM AND METHOD FOR CONTROLLING HANDLING OF TERMINATING A COMMUNICATION                     |
| 82281452     | Granted      | 7548754       | 4/11/2003   | 6/16/2009  | 10/412024          | US | Authentication And Non-interfering Sms-messaging In GSM Telephone Communication               |
| 82903423     | Published    |               | 3/26/2012   |            | 13/430161          | US | ROUTING REQUESTS OVER A NETWORK                                                               |
| 82942979     | Granted      | 8644855       | 8/31/2012   | 41674      | 13/602098          | US | FEMTOCELL NETWORK FOR DETERMINING LOCATION OF A MOBILE DEVICE                                 |
| 83213710     | Published    |               | 5/10/2013   |            | 13/891689          | US | FILTER REGULAR EXPRESSION                                                                     |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 83877424     | Published |               | 8/16/2012   |            | 14/349119          | US | SYSTEMS AND METHODS FOR MONITORING COMPLIANCE                                                                                                   |
| 83996413     | Published |               | 11/5/2014   |            | 14/533624          | US | STATUS BASED ON TIME-ORDERED REFERENCE PERIODS                                                                                                  |
| 84094535     | Published |               | 8/29/2012   |            | 14/401061          | US | FILTERING DATA FROM A DATABASE                                                                                                                  |
| 81971792     | Granted   | 7376953       | 10/29/2001  | 39588      | 10/020355          | US | CIRCUIT-SWITCHED CALL DELIVERY                                                                                                                  |
| 82065815     | Granted   | 7770199       | 3/18/2003   | 40393      | 10/390161          | US | Apparatus And Method For Routing A Transaction To A Server                                                                                      |
| 82081922     | Granted   | 6813691       | 10/31/2001  | 38293      | 10/001584          | US | Media Playing                                                                                                                                   |
| 82089542     | Granted   | 7185086       | 6/26/2002   | 2/27/2007  | 10/184684          | US | Computer Performance Improvement By Adjusting A Count                                                                                           |
| 82176068     | Granted   | 8230001       | 5/28/2004   | 7/24/2012  | 10/856330          | US | Used For Preemptive Eviction Of Cache Entries                                                                                                   |
| 82182059     | Granted   | 7340565       | 1/13/2004   | 3/4/2008   | 10/755919          | US | METHOD FOR ELECTRONIC TRACKING OF AN ELECTRONIC DEVICE                                                                                          |
| 82183502     | Granted   | 7240246       | 12/15/2003  | 7/3/2007   | 10/737449          | US | Providing Information About A System Using Scripts                                                                                              |
| 82197857     | Granted   | 7305518       | 10/20/2004  | 12/4/2007  | 10/969662          | US | Source Request Arbitration                                                                                                                      |
| 81971789     | Granted   | 7523454       | 3/6/2001    | 4/21/2009  | 09/799662          | US | Avoiding Name Collision For The ACPI Control Methods                                                                                            |
| 81971795     | Granted   | 7249179       | 11/9/2000   | 7/24/2007  | 09/709705          | US | Method And System For Dynamically Adjusting DRAM Refresh Rate                                                                                   |
|              |           |               |             |            |                    |    | Apparatus And Method For Routing A Transaction To A Partitioned Server                                                                          |
|              |           |               |             |            |                    |    | SYSTEM FOR AUTOMATICALLY ACTIVATING RESERVE HARDWARE COMPONENT BASED ON HIERARCHICAL RESOURCE DEPLOYMENT SCHEME OR RATE OF RESOURCE CONSUMPTION |
| 81971852     | Granted   | 6880156       | 7/27/2000   | 38454      | 09/626627          | US | Demand Responsive Method And Apparatus To Automatically Activate Spare Servers                                                                  |
| 81972728     | Granted   | 6832181       | 11/3/2000   | 12/14/2004 | 09/706095          | US | Method To Distinguish Between Physical Hardware And Simulated Hardware                                                                          |
| 81983471     | Granted   | 6907603       | 9/29/2003   | 6/14/2005  | 10/673842          | US | Software Update Management System With Update Chronology Generator                                                                              |
| 82001261     | Granted   | 7877607       | 8/30/2002   | 40568      | 10/231043          | US | Tamper-evident Data Management                                                                                                                  |
| 82022111     | Granted   | 5838962       | 4/9/1997    | 11/17/1998 | 08/840080          | US | INTERRUPT DRIVEN DYNAMIC ADJUSTMENT OF BRANCH PREDICTIONS                                                                                       |
| 82022609     | Granted   | 6101326       | 5/29/1997   | 8/8/2000   | 08/865565          | US | Method And Apparatus For Frame Elimination For Simple Procedures With Tail Calls                                                                |
| 82023611     | Granted   | 6898787       | 3/22/2001   | 38496      | 09/814511          | US | Method And Apparatus For Ordered Predicate Phi In Static Single Assignment Form                                                                 |
| 82031975     | Granted   | 6112280       | 1/6/1998    | 8/29/2000  | 09/003568          | US | METHOD AND APPARATUS FOR GENERATIONAL CODE CACHE MANAGER FOR A DYNAMIC OPTIMIZATION FRAMEWORK                                                   |
| 82035350     | Granted   | 6405238       | 7/31/1998   | 6/11/2002  | 09/127655          | US | Quick Navigation Upon Demand To Main Areas Of Web Site                                                                                          |
| 82055261     | Granted   | 7318102       | 5/23/2000   | 1/8/2008   | 09/578155          | US | Reliable Datagram                                                                                                                               |

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| 82055267     | Granted | 7904576       | 1/7/2008    | 3/8/2011   | 11/970306          | US | Reliable Datagram Via Independent Source Destination Resources                                                                     |
| 82057886     | Granted | 6832335       | 5/7/2003    | 38335      | 10/430395          | US | Transparent Software Emulation As An Alternative To Hardware Bus Lock                                                              |
| 82083293     | Granted | 7159184       | 7/31/2002   | 39084      | 10/207874          | US | Method And Graphical User Interface For Creating A Configuration File Used To Allocate Computer System Resources Among Workloads   |
| 82092599     | Granted | 7310741       | 8/17/2004   | 39434      | 10/920835          | US | PHASE ADJUSTED DELAY LOOP EXECUTED BY DETERMINING NUMBER OF NOPs BASED ON A MODULUS VALUE                                          |
| 82098344     | Granted | 7581224       | 7/10/2003   | 40050      | 10/616883          | US | Systems And Methods For Monitoring Resource Utilization And Application Performance                                                |
| 82099655     | Granted | 7447751       | 2/6/2003    | 39756      | 10/360880          | US | METHOD FOR DEPLOYING A VIRTUAL PRIVATE NETWORK                                                                                     |
| 82103714     | Granted | 7353328       | 3/29/2004   | 39539      | 10/812149          | US | Memory Testing                                                                                                                     |
| 82106273     | Granted | 8065368       | 7/31/2003   | 40869      | 10/632446          | US | Configuring Secure Templates For An Application And Network Management System                                                      |
| 82110389     | Granted | 6092213       | 35703       | 36725      | 08/941478          | US | A FAULT TOLERANT METHOD OF MAINTAINING AND DISTRIBUTING CONFIGURATION INFORMATION IN A DISTRIBUTED PROCESSING SYSTEM               |
| 82110512     | Granted | 6330552       | 9/28/1998   | 12/11/2001 | 09/162638          | US | DATABASE QUERY COST MODEL OPTIMIZER                                                                                                |
| 82115201     | Granted | 5834958       | 7/2/1993    | 11/10/1998 | 08/086955          | US | POWER ON SYSTEM                                                                                                                    |
| 82116131     | Granted | 5978914       | 1/23/1995   | 11/2/1999  | 08/377385          | US | METHOD AND APPARATUS FOR PREVENTING INADVERTENT CHANGES TO SYSTEM-CRITICAL FILES IN A COMPUTING SYSTEM                             |
| 82116512     | Granted | 5754752       | 3/28/1996   | 35934      | 08/625532          | US | END-TO-END SESSION RECOVERY                                                                                                        |
| 82116638     | Granted | 5852719       | 12/20/1995  | 36151      | 08/578410          | US | SYSTEM FOR TRANSFERRING DATA OVER A NETWORK IN WHICH A DATA SOURCE SENDS ONLY A DESCRIPTOR WHICH A DATA SINK USES TO RETRIEVE DATA |
| 82116698     | Granted | 6785690       | 3/17/1997   | 38230      | 08/819536          | US | Method And System For Storage, Retrieval, And Query Of Objects In A Schemeless Database                                            |
| 82116758     | Granted | 5682528       | 12/22/1995  | 10/28/1997 | 08/578889          | US | SPOON-FEED INITIALIZATION IN A MULTIPROCESSOR SYSTEM                                                                               |
| 82125815     | Granted | 5706514       | 3/4/1996    | 1/6/1998   | 08/610027          | US | DISTRIBUTED EXECUTION OF MODE MISMATCHED COMMANDS IN MULTIPROCESSOR COMPUTER SYSTEMS                                               |
| 82131116     | Granted | 6219041       | 9/24/1999   | 4/17/2001  | 08/940322          | US | UNIVERSAL USER INTERFACE FOR A SYSTEM UTILIZING MULTIPLE PROCESSES                                                                 |
| 82132802     | Granted | 6253318       | 7/29/1998   | 6/26/2001  | 09/126025          | US | METHOD OF DEVELOPING PHYSICAL REQUIREMENTS FOR COMPUTER CONFIGURATION                                                              |

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| 82132805     | Granted | 6192470       | 7/29/1998   | 2/20/2001  | 09/126024          | US | CONFIGURATION SIZER FOR SELECTING SYSTEM OF COMPUTER COMPONENTS BASED ON PRICE/PERFORMANCE NORMALIZATION                                  |
| 82136615     | Granted | 6212493       | 12/1/1998   | 36984      | 09/203119          | US | PROFILE DIRECTED SIMULATION USED TO TARGET TIME CRITICAL CROSSPRODUCTS DURING RANDOM VECTOR TESTING                                       |
| 82163648     | Granted | 5826254       | 4/18/1995   | 10/20/1998 | 08/423429          | US | SYSTEM FOR SELECTIVELY BROWSING A LARGE, DISTRIBUTED DIRECTORY TREE USING AUTHENTICATION LINKS                                            |
| 82164710     | Granted | 5831558       | 12/10/1997  | 11/3/1998  | 08/664656          | US | METHOD OF DATA IN A COMPUTER SYSTEM BY ENCODING DATA USING A DATA DICTIONARY                                                              |
| 82171451     | Granted | 7650040       | 7/21/2005   | 1/19/2010  | 11/185811          | US | Method, Apparatus And System For Data Block Rearrangement For LZ Data Compression                                                         |
| 82174631     | Allowed |               | 9/16/2005   |            | 11/228657          | US | Globally Fair Polling For Packet Switched Routers Using Dynamically Biased Arbitration                                                    |
| 82178195     | Granted | 7502333       | 3/23/2004   | 39882      | 10/806628          | US | Pre-configured Topology With Connection Management                                                                                        |
| 82178750     | Granted | 7401330       | 12/11/2003  | 39644      | 10/734551          | US | Cloning Programming Code                                                                                                                  |
| 82181999     | Granted | 8060610       | 10/28/2005  | 40862      | 11/261298          | US | Multiple Server Workload Management Using Instant Capacity Processors                                                                     |
| 82185188     | Granted | 7839765       | 10/5/2004   | 40505      | 10/957707          | US | Advertising Port State Changes In A Network                                                                                               |
| 82187678     | Granted | 7518614       | 38587       | 39917      | 11/210082          | US | Method And Apparatus For Capturing And Transmitting Screen Images                                                                         |
| 82189055     | Granted | 7530057       | 10/21/2004  | 5/5/2009   | 10/971267          | US | Program Code Coverage                                                                                                                     |
| 82191929     | Granted | 7516297       | 11/10/2005  | 4/7/2009   | 11/272155          | US | Memory Management                                                                                                                         |
| 82195361     | Granted | 7496722       | 4/26/2005   | 2/24/2009  | 11/114532          | US | Memory Mapped Page Priorities                                                                                                             |
| 82196045     | Granted | 8046760       | 7/9/2004    | 10/25/2011 | 10/887621          | US | Lock Contention Pinpointing                                                                                                               |
| 82197737     | Granted | 7434206       | 3/10/2005   | 10/7/2008  | 11/077826          | US | Identifying Memory Leaks In Computer Systems                                                                                              |
| 82199915     | Granted | 7730486       | 2/28/2005   | 6/1/2010   | 11/067838          | US | System And Method For Migrating Virtual Machines On Cluster Systems                                                                       |
| 82200353     | Granted | 7962789       | 6/28/2006   | 6/14/2011  | 11/476259          | US | Method And Apparatus For Automated Testing Of A Utility Computing System                                                                  |
| 82201106     | Granted | 7467327       | 1/25/2005   | 12/16/2008 | 11/042504          | US | Method And System Of Aligning Execution Point Of Duplicate Copies Of A User Program By Exchanging Information About Instructions Executed |
| 82203038     | Granted | 7426614       | 2/3/2006    | 9/16/2008  | 11/347642          | US | METHOD AND SYSTEM OF EXECUTING DUPLICATE COPIES OF A PROGRAM IN LOCK STEP                                                                 |
| 82203668     | Granted | 7590868       | 2/9/2005    | 9/15/2009  | 11/055245          | US | Method And Apparatus For Managing Encrypted Data On A Computer Readable Medium                                                            |

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| 82204667     | Granted | 7631269       | 10/27/2005  | 12/8/2009  | 11/261136          | US | Utility, Method And Device Providing Vector Images That May Be Updated To Reflect The Physical States Of Configurable Components Of A Device |
| 82208780     | Granted | 7451249       | 3/16/2006   | 11/11/2008 | 11/378852          | US | METHOD AND APPARATUS FOR DIRECT INPUT AND OUTPUT IN A VIRTUAL MACHINE ENVIRONMENT CONTAINING A GUEST OPERATING SYSTEM                        |
| 82209035     | Granted | 7694123       | 3/28/2006   | 4/6/2010   | 11/391593          | US | Storing Files For Operating System Restoration                                                                                               |
| 82209596     | Granted | 7412611       | 6/13/2005   | 8/12/2008  | 11/150919          | US | Power Management With Low Power Processes                                                                                                    |
| 82209782     | Granted | 7702931       | 6/27/2006   | 4/20/2010  | 11/475418          | US | Adjusting Power Budgets Of Multiple Servers                                                                                                  |
| 82212653     | Granted | 7613847       | 5/16/2006   | 11/3/2009  | 11/435831          | US | Partially Virtualizing An I/o Device For Use By Virtual Machines                                                                             |
| 82216337     | Allowed |               | 10/31/2006  |            | 11/590165          | US | Pre-computing Computer Software Patch Solutions                                                                                              |
| 82216460     | Granted | 7870543       | 12/8/2006   | 40554      | 11/608629          | US | Dynamic Tuning Of User-space Process                                                                                                         |
| 82216901     | Granted | 7586842       | 2/27/2007   | 9/8/2009   | 11/711944          | US | Failover Of Multicast Traffic Flows Using NIC Teaming                                                                                        |
| 82216964     | Granted | 8402172       | 12/10/2007  | 3/19/2013  | 12/000142          | US | Processing An Input/output Request On A Multiprocessor System                                                                                |
| 82218524     | Granted | 8214834       | 4/30/2007   | 7/3/2012   | 11/742555          | US | ASYNCHRONOUS WAKEUP MECHANISM                                                                                                                |
| 82218650     | Granted | 7953996       | 12/18/2006  | 40694      | 11/640572          | US | ACPI To Firmware Interface                                                                                                                   |
| 82218773     | Granted | 8171469       | 8/15/2006   | 5/1/2012   | 11/504480          | US | Package Compatibility                                                                                                                        |
| 82219271     | Granted | 7861042       | 10/23/2006  | 40540      | 11/552103          | US | Processor Acquisition Of Ownership Of Access Coordinator For Shared Resource                                                                 |
| 82219337     | Granted | 8910289       | 1/31/2007   | 41982      | 11/669208          | US | AUTOMATIC HARDENING OF AN UNCOMPROMISED COMPUTER NODE                                                                                        |
| 82220021     | Granted | 7436303       | 3/27/2006   | 39735      | 11/389784          | US | Rack Sensor Controller For Asset Tracking                                                                                                    |
| 82220522     | Granted | 8020166       | 1/25/2007   | 40799      | 11/657962          | US | DYNAMICALLY CONTROLLING THE NUMBER OF BUSY WAITERS IN A SYNCHRONIZATION OBJECT                                                               |
| 82221707     | Granted | 8056084       | 1/25/2007   | 11/8/2011  | 11/626957          | US | METHOD AND SYSTEM FOR RESOURCE ALLOCATION                                                                                                    |
| 82224077     | Granted | 7610429       | 1/30/2007   | 10/27/2009 | 11/668493          | US | Method And System For Determining Device Criticality In A Computer Configuration                                                             |
| 82226387     | Granted | 7856488       | 3/30/2007   | 12/21/2010 | 11/694223          | US | Electronic Device Profile Migration                                                                                                          |
| 82227950     | Granted | 8046766       | 4/26/2007   | 10/25/2011 | 11/740850          | US | Process Assignment To Physical Processors Using Minimum And Maximum Processor Shares                                                         |
| 82228010     | Granted | 8966474       | 4/30/2007   | 2/24/2015  | 11/742536          | US | Managing Virtual Machines Using Shared Image                                                                                                 |
| 82228076     | Granted | 8386391       | 5/1/2007    | 2/26/2013  | 11/742656          | US | RESOURCE-TYPE WEIGHTING OF USE RIGHTS                                                                                                        |
| 82229636     | Granted | 8768978       | 7/30/2007   | 7/1/2014   | 11/830541          | US | SINGLE-OPERATION ON-LINE SCHEMA EVOLUTION                                                                                                    |
| 82231193     | Granted | 7765242       | 5/10/2007   | 7/27/2010  | 11/801970          | US | METHODS AND APPARATUS FOR STRUCTURE LAYOUT OPTIMIZATION FOR MULTI-THREADED PROGRAMS                                                          |
| 82231262     | Granted | 8584138       | 7/30/2007   | 11/12/2013 | 11/888232          | US | DIRECT SWITCHING OF SOFTWARE THREADS BY SELECTIVELY BYPASSING RUN QUEUE BASED ON SELECTION CRITERIA                                          |

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| 82231568     | Granted     | 7765238       | 4/30/2007   | 7/27/2010  | 11/7/99429         | US | MAPPING AN ACTIVE ENTRY WITHIN A HASHED PAGE TABLE                                                                   |
| 82235132     | Published   |               | 9/13/2007   |            | 11/855121          | US | Virtual Machine Scheduler With Memory Access Control                                                                 |
| 82235564     | Granted     | 8176498       | 9/11/2007   | 5/8/2012   | 11/853134          | US | Power Setting Adjustments By Mission Operating System in Response To Requests From Platform Manager                  |
| 82235567     | Granted     | 8356306       | 7/31/2007   | 1/15/2013  | 11/831852          | US | Workload Management Controller Using Dynamic Statistical Control                                                     |
| 82237940     | Granted     | 8281303       | 10/31/2007  | 10/2/2012  | 11/932440          | US | Dynamic Allocation Of Virtual Machine Devices                                                                        |
| 82238624     | Granted     | 8495662       | 9/23/2008   | 7/23/2013  | 12/235625          | US | System And Method For Improving Run-time Performance Of Applications With Multithreaded And Single Threaded Routines |
| 82238810     | Published   |               | 12/15/2008  |            | 12/334552          | US | System And Method For Flexible Device Driver Resource Allocation                                                     |
| 82241432     | Granted     | 8626976       | 2/26/2008   | 1/7/2014   | 12/919050          | US | Method And Apparatus For Performing A Host Enumeration Process                                                       |
| 82244309     | Granted     | 9152200       | 8/13/2009   | 10/6/2015  | 12/540908          | US | Resource And Power Management Using Nested Heterogeneous Hypervisors                                                 |
| 82246739     | Granted     | 8868622       | 10/23/2009  | 10/21/2014 | 12/604719          | US | Method And Apparatus For Allocating Resources In A Computer System                                                   |
| 82247552     | Application |               | 12/23/2008  |            | 12/342487          | US | Dynamic Rule-Based Privilege Elevation                                                                               |
| 82247738     | Granted     | 8489753       | 9/7/2009    | 7/16/2013  | 12/554934          | US | APPARATUS AND COMPUTER-IMPLEMENTED METHOD FOR CONTROLLING MIGRATION OF A VIRTUAL MACHINE                             |
| 82247804     | Application |               | 10/30/2008  |            | 12/262129          | US | DRAW-AND-DROP LICENSING                                                                                              |
| 82247930     | Application |               | 1/28/2009   |            | 12/361414          | US | AUTHENTICATION METHOD SELECTION BASED ON CLIENT-SPECIFIC INFORMATION                                                 |
| 82248242     | Granted     | 8898085       | 1/30/2009   | 11/25/2014 | 12/362723          | US | LICENSE MANAGEMENT SOLUTION FOR CENTRAL-MANAGEMENT PRODUCTS                                                          |
| 82249178     | Published   |               | 3/11/2009   |            | 12/401619          | US | Method And System For Optimizing Network Input/output Performance                                                    |
| 82258418     | Granted     | 8832235       | 3/17/2009   | 9/9/2014   | 12/406060          | US | DEPLOYING AND RELEASING LOGICAL SERVERS                                                                              |
| 82258727     | Granted     | 8713139       | 10/29/2009  | 4/29/2014  | 12/588844          | US | AUTOMATIC FIXUP OF NETWORK CONFIGURATION ON SYSTEM IMAGE MOVE                                                        |
| 82262789     | Granted     | 8489893       | 4/9/2010    | 7/16/2013  | 12/757855          | US | ENCRYPTION KEY ROTATION MESSAGES WRITTEN AND OBSERVED BY STORAGE CONTROLLERS VIA STORAGE MEDIA                       |
| 83097437     | Published   |               | 12/21/2012  |            | 13/724193          | US | BOOT FROM MODIFIED IMAGE                                                                                             |
| 83264003     | Granted     | 9037925       | 11/30/2010  | 5/19/2015  | 13/885687          | US | CHANGE MESSAGE BROADCAST ERROR DETECTION                                                                             |
| 84197944     | Published   |               | 4/16/2015   |            | 14/688582          | US | CHANGE MESSAGE BROADCAST ERROR DETECTION                                                                             |
| 81968606     | Granted     | 7441066       | 12/29/2003  | 10/21/2008 | 10/750606          | US | MANAGING A COMPUTER SYSTEM HAVING A PLURALITY OF PARTITIONS USING A SERVICE PROCESSOR                                |

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| 81976850     | Granted   | 6654252       | 7/18/2001   | 11/25/2003 | 09/908375 US       | US | Server System With Removable Server Cartridges                                                                                                        |
| 81976853     | Granted   | 6895532       | 5/3/2001    | 5/17/2005  | 09/848574 US       | US | Wireless Server Diagnostic System And Method                                                                                                          |
| 81991208     | Granted   | 7348495       | 2/5/2004    | 3/25/2008  | 10/773723 US       | US | Uniform Force Hydrostatic Bolster Plate                                                                                                               |
| 82019681     | Granted   | 6055610       | 8/25/1997   | 4/25/2000  | 08/918209 US       | US | DISTRIBUTED MEMORY MULTIPROCESSOR COMPUTER SYSTEM WITH DIRECTORY BASED CACHE COHERENCY WITH AMBIGUOUS MAPPING OF CACHED DATA TO MAIN-MEMORY LOCATIONS |
| 82085042     | Granted   | 6767220       | 9/25/2003   | 7/27/2004  | 10/671647 US       | US | Systems And Methods For Interconnecting Electronic Components                                                                                         |
| 82090853     | Granted   | 7360295       | 3/15/2005   | 4/22/2008  | 11/080908 US       | US | System And Method For Securely Positioning Apparatus Within A Housing                                                                                 |
| 82093034     | Granted   | 6895489       | 8/7/2002    | 5/17/2005  | 10/212740 US       | US | System And Method For Operating In Endian Independent Mode                                                                                            |
| 82095659     | Granted   | 7583497       | 8/26/2003   | 9/1/2009   | 10/647915 US       | US | Drive Loading System                                                                                                                                  |
| 82097468     | Granted   | 7307862       | 9/4/2003    | 12/11/2007 | 10/555927 US       | US | Circuit And System For Accessing Memory Modules                                                                                                       |
| 82098650     | Published |               | 1/7/2009    |            | 12/349703 US       | US | Integrated Margin Testing                                                                                                                             |
| 82101962     | Granted   | 7453701       | 8/17/2005   | 11/18/2008 | 11/205715 US       | US | Computer System With Movable Card Guide                                                                                                               |
| 82103525     | Granted   | 7398345       | 6/12/2003   | 7/8/2008   | 10/461183 US       | US | INTER-INTEGRATED CIRCUIT BUS ROUTER FOR PROVIDING INCREASED SECURITY                                                                                  |
| 82107584     | Granted   | D494975       | 7/26/2002   | 38223      | 29/164569 US       | US | Handle For A Chassis Mounted Server Computer (as Amended)                                                                                             |
| 82118069     | Granted   | 6976184       | 8/27/2003   | 12/13/2005 | 10/649523 US       | US | Clock Forward Initialization And Reset Signaling Technique                                                                                            |
| 82118507     | Granted   | 7103694       | 9/7/2001    | 9/5/2006   | 09/948872 US       | US | METHOD AND APPARATUS IMPLEMENTING A TUNED STUB SCSI TOPOLOGY                                                                                          |
| 82121813     | Granted   | 6858792       | 12/19/2002  | 2/22/2005  | 10/324693 US       | US | Tool-Less Coupling Assembly                                                                                                                           |
| 82127186     | Granted   | 5726866       | 2/14/1996   | 3/10/1998  | 08/601193 US       | US | SLIDE OUT READILY ACCESSIBLE CHASSIS Having A Trough For Protecting Cables And A Hinge That Includes A Conduit                                        |
| 82127813     | Granted   | 5822196       | 6/5/1996    | 10/13/1998 | 08/658385 US       | US | SECURING A CARD IN AN ELECTRONIC DEVICE                                                                                                               |
| 82128995     | Granted   | 5754406       | 6/4/1996    | 5/19/1998  | 08/659004 US       | US | PRINTED CIRCUIT BOARD CARD GUIDE HAVING ISOLATION ARMS AND MEANS FOR SECURING PCB                                                                     |
| 82128998     | Granted   | 6229709       | 1/28/1998   | 5/8/2001   | 09/014301 US       | US | PRINTED CIRCUIT BOARD CARD GUIDE                                                                                                                      |
| 82132178     | Granted   | 6819555       | 8/26/2002   | 11/16/2004 | 10/227740 US       | US | HOT-PLUGGABLE DISK DRIVE CARRIER HAVING ENHANCED ROTATIONAL DRIVE VIBRATION CONTROL CAPABILITY                                                        |
| 82132739     | Granted   | 6294908       | 7/16/1998   | 9/25/2001  | 09/116774 US       | US | TOP AND BOTTOM ACCESS FUNCTIONAL TEST FIXTURE                                                                                                         |
| 82133114     | Granted   | 6052281       | 2/12/1999   | 4/18/2000  | 09/249031 US       | US | COMPUTER CHASSIS WITH AIRFLOW CONTROL MECHANISMS                                                                                                      |
| 82133117     | Granted   | 6129429       | 2/12/1999   | 10/10/2000 | 09/249374 US       | US | RACK SERVICEABLE COMPUTER CHASSIS ASSEMBLY                                                                                                            |
| 82133678     | Granted   | 6354164       | 4/4/2000    | 3/12/2002  | 09/542308 US       | US | LEVER SYSTEM UTILIZING RACK AND PINION GEAR                                                                                                           |
| 82133681     | Granted   | 6912124       | 3/11/2002   | 6/28/2005  | 10/094779 US       | US | Lever System For Moving A Component Within A Chassis                                                                                                  |
| 82134926     | Granted   | 5941621       | 2/28/1997   | 8/24/1999  | 08/807935 US       | US | CABINET SLIDE MOUNTING BRACKET                                                                                                                        |

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| 82134929     | Granted | 5978212       | 2/28/1997   | 11/2/1999  | 08/808596          | US | DISK DRIVE LOCKING MEMBER WITH HANDLE                                                                                                            |
| 82134986     | Granted | 6094686       | 10/24/1997  | 7/25/2000  | 09/220161          | US | A MULTI-PROCESSOR SYSTEM FOR TRANSFERRING DATA WITHOUT INCURRING DEADLOCK USING HIERARCHICAL VIRTUAL CHANNELS                                    |
| 81999698     | Granted | 7310708       | 8/26/2003   | 12/18/2007 | 10/649917          | US | Cache System With Groups Of Lines And With Coherence For Both Single Lines And Groups Of Lines                                                   |
| 82007003     | Granted | 6912616       | 11/12/2002  | 6/28/2005  | 10/292144          | US | Mapping Addresses To Memory Banks Based On At Least One Mathematical Relationship                                                                |
| 82030856     | Granted | 6874077       | 8/27/2003   | 3/29/2005  | 10/648405          | US | Parallel Distributed Function Translation Lookaside Buffer                                                                                       |
| 82044836     | Granted | 6393544       | 10/31/1999  | 5/21/2002  | 09/430793          | US | METHOD AND APPARATUS FOR CALCULATING A PAGE TABLE INDEX FROM A VIRTUAL ADDRESS                                                                   |
| 82105958     | Granted | 7516205       | 8/16/2004   | 4/7/2009   | 10/919153          | US | System And Method For Concurrently Decoding And Transmitting A Memory Request                                                                    |
| 82106393     | Granted | 7533293       | 2/17/2006   | 39945      | 11/356564          | US | Systems And Methods For CPU Repair                                                                                                               |
| 82117382     | Granted | 6981095       | 8/5/2003    | 12/27/2005 | 10/634576          | US | HOT REPLACE POWER CONTROL SEQUENCE LOGIC                                                                                                         |
| 82117634     | Granted | 6633960       | 8/31/2000   | 10/14/2003 | 09/652703          | US | SCALABLE DIRECTORY BASED CACHE COHERENCE PROTOCOL                                                                                                |
| 82120382     | Granted | 6684292       | 9/28/2001   | 1/27/2004  | 09/966892          | US | MEMORY MODULE RESYNC                                                                                                                             |
| 82121876     | Granted | 7051162       | 4/7/2003    | 5/23/2006  | 10/408801          | US | Methods And Apparatus Used To Retrieve Data From Memory Before Such Data Is Requested                                                            |
| 82127687     | Granted | 6035362       | 4/7/1998    | 3/7/2000   | 08/658728          | US | STORING DATA ASSOCIATED WITH ONE REQUEST WHILE CONTINUING TO STORE DATA ASSOCIATED WITH A PREVIOUS REQUEST FROM THE SAME DEVICE                  |
| 82127933     | Granted | 5841795       | 2/12/1996   | 11/24/1998 | 08/599757          | US | ERROR CORRECTION CODES                                                                                                                           |
| 82129436     | Granted | 6038680       | 12/11/1996  | 3/14/2000  | 08/763411          | US | FAILOVER MEMORY FOR A COMPUTER SYSTEM                                                                                                            |
| 82132058     | Granted | 6898646       | 5/3/2000    | 5/24/2005  | 09/564341          | US | Highly Concurrent DMA Controller With Programmable DMA Channels                                                                                  |
| 82132619     | Granted | 6463510       | 12/29/2000  | 10/8/2002  | 09/751505          | US | APPARATUS FOR IDENTIFYING MEMORY REQUESTS ORIGINATING ON REMOTE I/O DEVICES AS NONCACHEABLE                                                      |
| 82134992     | Granted | 6101581       | 10/24/1997  | 8/8/2000   | 08/957217          | US | SEPARATE VICTIM BUFFER READ AND RELEASE CONTROL                                                                                                  |
| 82163396     | Granted | 6226703       | 11/9/1998   | 5/1/2001   | 09/188847          | US | METHOD AND APPARATUS FOR REDUCING THE APPARENT READ LATENCY WHEN CONNECTING BUSES WITH FIXED READ REPLAY TIMEOUTS TO CPUS WITH WRITE-BACK CACHES |
| 82174508     | Granted | 7404190       | 9/18/2003   | 7/22/2008  | 10/664707          | US | METHOD AND APPARATUS FOR PROVIDING NOTIFICATION VIA MULTIPLE COMPLETION QUEUE HANDLERS                                                           |
| 82180379     | Granted | 7757232       | 8/14/2003   | 7/13/2010  | 10/641129          | US | Method And Apparatus For Implementing Work Request Lists                                                                                         |

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| 82184501     | Granted     | 7774562       | 9/17/2004   | 8/10/2010  | 10/944524          | US | Timeout Acceleration For Globally Shared Memory Transaction Tracking Table                                                                                |
| 82197230     | Granted     | 7873895       | 4/4/2009    | 1/18/2011  | 12/418581          | US | Memory Subsystems With Fault Isolation                                                                                                                    |
| 82206971     | Granted     | 7430145       | 9/16/2005   | 9/30/2008  | 11/229084          | US | System And Method For Avoiding Attempts To Access A Defective Portion Of Memory                                                                           |
| 82212404     | Granted     | 8612797       | 3/31/2006   | 12/17/2013 | 11/394585          | US | Systems And Methods Of Selectively Managing Errors In Memory Modules                                                                                      |
| 82225892     | Granted     | 8661208       | 4/11/2007   | 2/25/2014  | 11/733857          | US | NON-INCLUSIVE CACHE SYSTEMS AND METHODS                                                                                                                   |
| 82227449     | Granted     | 7996710       | 4/25/2007   | 8/9/2011   | 11/740052          | US | Defect Management For A Semiconductor Memory System                                                                                                       |
| 82250489     | Granted     | 8103837       | 12/17/2008  | 1/24/2012  | 12/337008          | US | Servicing Memory Read Requests                                                                                                                            |
| 82265099     | Granted     | 8488326       | 11/16/2010  | 41471      | 12/947473          | US | MEMORY SUPPORT STRUCTURE                                                                                                                                  |
| 82672028     | Granted     | 8760312       | 10/29/2008  | 6/24/2014  | 13/126133          | US | Component Installation Guidance                                                                                                                           |
| 82849085     | Granted     | 8866023       | 4/17/2009   | 10/21/2014 | 13/265323          | US | Method And System For Reducing Trace Length And Capacitance In A Large Memory Footprint Background                                                        |
| 83153026     | Published   |               | 5/31/2013   |            | 13/906375          | US | DELAYING BUS ACTIVITY TO ACCOMMODATE MEMORY DEVICE PROCESSING TIME                                                                                        |
| 83981746     | Published   |               | 3/27/2012   |            | 14/368573          | US | NONVOLATILE MEMORY BANK GROUPS                                                                                                                            |
| 84210934     | Published   |               | 1/30/2013   |            | 14/435167          | US | RUNTIME BACKUP OF DATA IN A MEMORY MODULE                                                                                                                 |
| 82202606     | Published   |               | 1/31/2005   |            | 11/047227          | US | A Method And Apparatus For Product Management                                                                                                             |
| 82251800     | Granted     | 7113923       | 2/3/1999    | 9/26/2006  | 09/244550          | US | System and Method of Managing an Office of Programs                                                                                                       |
| 82252607     | Granted     | 5878416       | 6/14/1996   | 3/2/1999   | 08/664332          | US | Automated System And Method For Matching An Item Of Business Property To A Recipient                                                                      |
| 82253051     | Granted     | 5752242       | 4/18/1996   | 35927      | 08/634640          | US | System And Method For Automated Retrieval Of Information                                                                                                  |
| 82255361     | Granted     | 8321247       | 4/29/2003   | 11/27/2012 | 10/426071          | US | BUSINESS LEVEL METRIC FOR INFORMATION TECHNOLOGY                                                                                                          |
| 82256417     | Granted     | 8738759       | 9/23/2004   | 41786      | 10/947858          | US | System And Method For Service Response Monitoring                                                                                                         |
| 82256543     | Application |               | 9/14/2004   |            | 10/941033          | US | System, Method, And Computer Program Product For Client-service Provider And Service Provider-vendor Agreement Translation, Configuration, And Monitoring |
| 82256981     | Granted     | 7574421       | 6/23/2006   | 8/11/2009  | 11/473427          | US | EXPLICIT KEY PAGING                                                                                                                                       |
| 82257734     | Granted     | 8549064       | 8/12/2008   | 41548      | 12/190484          | US | SYSTEM AND METHOD FOR DATA MANAGEMENT                                                                                                                     |
| 82263350     | Published   |               | 5/27/2010   |            | 12/789240          | US | Flexible Extended Product Warranties                                                                                                                      |
| 82578695     | Granted     | 8478620       | 2/15/2011   | 7/2/2013   | 13/027942          | US | PROFIT COMPARISON OF EXTENDED WARRANTIES                                                                                                                  |
| 82656090     | Published   |               | 10/28/2008  |            | 13/125725          | US | WORKFORCE PLANNING                                                                                                                                        |
| 82929142     | Published   |               | 3/8/2010    |            | 13/581603          | US | METHODS AND SYSTEMS FOR IDENTIFYING CUSTOMER STATUS FOR DEVELOPING CUSTOMER RETENTION AND LOYALTY STRATEGIES                                              |
| 83108386     | Published   |               | 10/25/2012  |            | 13/660286          | US | ESTIMATING SEMI-PARAMETRIC PRODUCT DEMAND MODELS                                                                                                          |

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| 83139083     | Published   |               | 1/30/2013   |            | 13/753669          | US | PARTITIONING JOB REQUIREMENTS FOR RESOURCE PLANNING                                                                                                                        |
| 82077176     | Granted     | 6594647       | 7/30/1998   | 7/15/2003  | 09/463518          | US | Real Time Bank-Centric Universal Payment System (Bits)                                                                                                                     |
| 82077305     | Granted     | 5815657       | 4/26/1996   | 9/29/1998  | 08/638355          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR NETWORK ELECTRONIC AUTHORIZATION UTILIZING AN AUTHORIZATION INSTRUMENT                                                       |
| 82077491     | Granted     | 5812668       | 6/17/1996   | 9/22/1998  | 08/668118          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR VERIFYING THE OPERATION OF A REMOTE TRANSACTION CLEARANCE SYSTEM UTILIZING A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE |
| 82077548     | Granted     | 6304915       | 5/17/1999   | 10/16/2001 | 09/313122          | US | System, Method And Article Of Manufacture For A Gateway System Architecture With System Administration Information Accessible From A Browser                               |
| 82077554     | Granted     | 5996076       | 2/19/1997   | 11/30/1999 | 08/801026          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR SECURE DIGITAL CERTIFICATION OF ELECTRONIC COMMERCE                                                                          |
|              |             |               |             |            |                    |    |                                                                                                                                                                            |
| 82101836     | Granted     | 7761375       | 3/16/2004   | 7/20/2010  | 10/802163          | US | TRANSACTION SWITCH AND A METHOD OF USE THEREOF                                                                                                                             |
| 82175006     | Granted     | 7427020       | 1/23/2007   | 9/23/2008  | 11/656666          | US | AUTHENTICATION METHOD AND SYSTEM                                                                                                                                           |
| 82251860     | Granted     | 6059185       | 3/28/1996   | 5/9/2000   | 08/623480          | US | Automated System and Method for Improved Check Processing                                                                                                                  |
| 82252361     | Granted     | 5832452       | 1/31/1996   | 11/3/1998  | 08/594460          | US | Hotel Database Inquiry System                                                                                                                                              |
| 82252364     | Granted     | 5842176       | 11/13/1995  | 11/24/1998 | 08/555464          | US | Method And Apparatus For Interacting With A Computer Reservation System                                                                                                    |
| 82255610     | Granted     | 8600879       | 8/5/2003    | 41611      | 10/634635          | US | Method And System For Effecting Payment By Checks Through The Use Of Image Replacement Documents                                                                           |
| 82257419     | Granted     | 8213585       | 2/7/2008    | 7/3/2012   | 12/027481          | US | AUTOMATED DISTRIBUTION AND INDEXING OF PREPAID CALLING CARD INFORMATION                                                                                                    |
| 82257545     | Published   |               | 3/11/2008   |            | 12/075421          | US | SYSTEM AND METHOD FOR CUSTOMER FEEDBACK                                                                                                                                    |
| 82257731     | Granted     | 9082090       | 7/24/2008   | 7/14/2015  | 12/179343          | US | SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR RESOURCE COLLABORATION OPTIMIZATION                                                                                       |
| 83805582     | Published   |               | 9/13/2011   |            | 14/237223          | US | PUBLISHER COMPENSATION SYSTEM                                                                                                                                              |
| 84306368     | Application |               | 1/25/2013   |            | 14/759863          | US | BARCODE DEVICE                                                                                                                                                             |
| 81970046     | Granted     | 7376965       | 5/14/2001   | 5/20/2008  | 09/861986          | US | System And Method For Implementing A Bubble Policy To Achieve Host And Network Security                                                                                    |
| 81983531     | Granted     | 7096491       | 7/20/2001   | 8/22/2006  | 09/908592          | US | Mobile Code Security Architecture In An Application Service Provider Environment                                                                                           |
| 82230698     | Published   |               | 4/25/2007   |            | 11/739839          | US | Systems And Methods For Providing Remediation Recommendations                                                                                                              |
| 82252049     | Granted     | 6006278       | 7/18/1997   | 12/21/1999 | 08/896724          | US | Method And System For Importing Remote Functions To A Network Computer                                                                                                     |

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| 82252052     | Granted   | 6032153       | 1/30/1998   | 2/29/2000  | 09/016077          | US | Method And System For Maintaining Persistence In A Stream-Object System                                                              |
| 82252550     | Granted   | 5875333       | 6/7/1996    | 2/23/1999  | 08/660353          | US | Automatically Generating Source Code for Relating a Diagram Interface with a Business Object in a Computing Application              |
| 82252739     | Granted   | 5978581       | 12/2/1997   | 11/2/1999  | 08/982331          | US | Object-oriented Code Generation System And Method                                                                                    |
| 82254917     | Granted   | 7412430       | 12/9/2002   | 8/12/2008  | 10/314420          | US | Determining the Quality of Computer Software                                                                                         |
| 82254923     | Granted   | 7565688       | 12/23/2002  | 7/21/2009  | 10/326287          | US | Network Demonstration Techniques                                                                                                     |
| 82256480     | Granted   | 7853489       | 11/22/2005  | 12/14/2010 | 11/285320          | US | SYSTEM AND METHOD FOR AGENT BASED DEVELOPER SELF SELECTION                                                                           |
| 82256732     | Granted   | 8146072       | 7/30/2004   | 3/27/2012  | 10/903257          | US | SYSTEM AND METHOD FOR UPDATING SOFTWARE ON A COMPUTER                                                                                |
| 82257170     | Granted   | 6345281       | 3/1/1999    | 2/5/2002   | 09/260858          | US | RECOVERY METHOD AND SYSTEM FOR A RESOURCE MANAGEMENT SYSTEM                                                                          |
| 82257293     | Published |               | 9/17/2007   |            | 11/856675          | US | Asset Data Collection, Presentation, And Management                                                                                  |
| 82257353     | Granted   | 7783750       | 7/30/2007   | 8/24/2010  | 11/881870          | US | SYSTEM AND METHOD FOR EXTERNALIZED REAL-TIME LOG CORRELATION AND PERFORMANCE MONITORING OF SERVICE-ORIENTED APPLICATIONS             |
| 82257602     | Published |               | 5/6/2008    |            | 12/115943          | US | APPARATUS, AND ASSOCIATED METHOD, FOR FACILITATING DATA-CENTER MANAGEMENT                                                            |
| 82257665     | Allowed   |               | 8/14/2008   |            | 12/191838          | US | HETEROGENEOUS INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE MANAGEMENT ORCHESTRATION                                                    |
| 82037849     | Granted   | 6275546       | 6/30/1998   | 8/14/2001  | 09/107118          | US | Glitchless Clock Switch Circuit                                                                                                      |
| 82040963     | Granted   | 6647491       | 10/1/2001   | 11/11/2003 | 09/968283          | US | HARDWARE/SOFTWARE SYSTEM FOR PROFILING INSTRUCTIONS AND SELECTING A TRACE USING BRANCH HISTORY INFORMATION FOR BRANCH PREDICTIONS    |
| 82042400     | Granted   | 6734045       | 1/3/2001    | 5/11/2004  | 09/753703          | US | Lossy RF Shield For Integrated Circuits                                                                                              |
| 82043339     | Granted   | 6823392       | 11/29/2001  | 11/23/2004 | 09/995760          | US | Hybrid And Predictive Admission Control Strategies For A Server                                                                      |
| 82043591     | Granted   | 6295644       | 8/17/1999   | 9/25/2001  | 09/375624          | US | Method And Apparatus For Patching Program Text To Improve Performance Of Applications                                                |
| 82043900     | Granted   | 6707636       | 12/5/2002   | 3/16/2004  | 10/310433          | US | CARTRIDGE PICKER ASSEMBLY                                                                                                            |
| 82046897     | Granted   | 6308320       | 1/15/1999   | 10/23/2001 | 09/232398          | US | Method And Apparatus For Incremental Selective Compilation Of Intermediate Code Files During Computer System Compilation And Linking |
| 82048712     | Granted   | 6314431       | 9/2/1999    | 11/6/2001  | 09/387392          | US | METHOD, SYSTEM, AND APPARATUS TO IMPROVE INSTRUCTION PRE-FETCHING ON COMPUTER SYSTEMS                                                |
| 82049024     | Granted   | 6625679       | 4/19/1999   | 9/23/2003  | 09/294927          | US | Apparatus And Method For Converting Interrupt Transactions To Interrupt Signals To Distribute Interrupts To Ia-32 Processors         |
| 82050704     | Granted   | 6636916       | 2/14/2000   | 10/21/2003 | 09/503749          | US | Assigning PCI Device Interrupts In A Computer System                                                                                 |

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| 82050767     | Granted | 6789253       | 7/28/1999   | 9/7/2004   | 09/363067          | US | Method, System, And Apparatus To Improve Performance Of Multi-Threaded Computer Programs                                             |
| 82051328     | Granted | 6647618       | 8/22/2001   | 11/18/2003 | 09/935605          | US | A METHOD OF ASSEMBLING A CIRCUIT BOARD INTO A HOUSING                                                                                |
| 82053512     | Granted | 6687836       | 11/26/1999  | 2/3/2004   | 09/449794          | US | Method And Apparatus Which Enable A Computer User To Verify Whether They Have Correctly Input Their Password Into A Computer         |
| 82055012     | Granted | 6724768       | 11/26/1999  | 4/20/2004  | 09/449840          | US | Method And System For Enforcing Maximum Transit Delay In Network Multiplexers                                                        |
| 82055015     | Granted | 6804767       | 11/26/1999  | 10/12/2004 | 09/449839          | US | Method And System For Automatic Address Table Reshuffling In Network Multiplexers                                                    |
| 82057385     | Granted | 6615377       | 5/8/2000    | 9/2/2003   | 09/566367          | US | INTEGRATED CIRCUIT WITH SIGNAL-VECTOR QUEUE FOR NORMAL AND TEST MODES OF OPERATION                                                   |
| 82059257     | Granted | 6697881       | 5/29/2001   | 2/24/2004  | 09/870312          | US | Method And System For Efficient Format, Read, Write, And Initial Copy Processing Involving Sparse Logical Units                      |
| 82069250     | Granted | 6892186       | 9/13/2000   | 5/10/2005  | 09/661463          | US | Auction Method And Apparatus For Electronic Commerce                                                                                 |
| 82069310     | Granted | 7383424       | 6/15/2000   | 6/3/2008   | 09/762981          | US | COMPUTER ARCHITECTURE CONTAINING PROCESSOR AND DECOUPLED COPROCESSOR                                                                 |
| 82071557     | Granted | 5731998       | 7/1/1996    | 3/24/1998  | 08/674052          | US | METHOD AND APPARATUS FOR COMPARING A SAMPLE WITH A REFERENCE USING A SPIDER DIAGRAM                                                  |
| 82082363     | Granted | 7051238       | 7/30/2002   | 5/23/2006  | 10/209101          | US | Method And System For Using Machine-architecture Support To Distinguish Function And Routine Return Values                           |
| 82082858     | Granted | 6661673       | 2/12/2002   | 12/9/2003  | 10/074783          | US | CARD GUIDE WITH CHANGEABLE END FACE PORTION                                                                                          |
| 82083668     | Granted | 6626300       | 12/10/2001  | 9/30/2003  | 10/015074          | US | Rack Assembly That Does Not Require Tools For Coupling Chassis To Slide                                                              |
| 82086356     | Granted | 6685489       | 10/24/2002  | 2/3/2004   | 10/279524          | US | Circuit Board Leverage Mechanism                                                                                                     |
| 82087103     | Granted | 6990507       | 5/21/2002   | 1/24/2006  | 10/151038          | US | Parity Prediction For Arithmetic Increment Function                                                                                  |
| 82088042     | Granted | 6817374       | 9/29/2003   | 11/16/2004 | 10/674473          | US | Check Valve                                                                                                                          |
| 82088162     | Granted | 7058838       | 12/17/2002  | 6/6/2006   | 10/322073          | US | System And Method For Synchronizing A Plurality Of Processors In A Multiprocessor Computer Platform Employing A Global Clock Counter |
| 82090847     | Granted | 6874223       | 10/30/2002  | 4/5/2005   | 10/283459          | US | System And Method For Securely Positioning Apparatus Within A Housing                                                                |
| 82093595     | Granted | 7237020       | 11/8/2002   | 39259      | 10/290643          | US | Integer Programming Technique For Verifying And Reprovisioning An Interconnect Fabric Design                                         |
| 82093598     | Granted | 6796625       | 9/10/2002   | 38258      | 10/241793          | US | One-motion Installation Slide Assembly                                                                                               |
| 82094783     | Granted | 6856926       | 3/3/2003    | 38398      | 10/378238          | US | Frequency Margin Testing Of Bladed Servers                                                                                           |
| 82097219     | Granted | 7289988       | 7/8/2003    | 39385      | 10/614060          | US | Method And System For Managing Events                                                                                                |
| 82097840     | Granted | 6786056       | 12/4/2002   | 9/7/2004   | 10/309188          | US | Cooling System With Evaporators Distributed In Parallel                                                                              |

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| 82099406     | Granted | 7562229       | 1/23/2003   | 7/14/2009  | 10/351064          | US | Codeword-based Auditing Of Computer Systems And Methods Therefor                                                                                                                                     |
| 82100339     | Granted | 7373619       | 6/3/2003    | 5/13/2008  | 10/453103          | US | Post-silicon Test Coverage Verification                                                                                                                                                              |
| 82100588     | Granted | 6927605       | 11/7/2003   | 8/9/2005   | 10/704252          | US | System And Method For Dynamically Varying A Clock Signal                                                                                                                                             |
| 82101590     | Granted | 7331003       | 8/6/2003    | 2/12/2008  | 10/635373          | US | Match Circuit For Performance Counter                                                                                                                                                                |
| 82102025     | Granted | 6857897       | 4/29/2003   | 38405      | 10/425409          | US | Remote Cable Assist                                                                                                                                                                                  |
| 82103462     | Granted | 7373633       | 7/3/2003    | 5/13/2008  | 10/613816          | US | Method Of Managing Modification Of Configuration States Of Resources In A Dynamic Data Center                                                                                                        |
| 82104581     | Granted | 7299467       | 12/23/2002  | 11/20/2007 | 10/328440          | US | Method And System For Minimizing Memory Access Latency In A Computer System                                                                                                                          |
| 82104836     | Granted | 7313210       | 2/28/2003   | 39441      | 10/376835          | US | System And Method For Establishing A Known Timing Relationship Between Two Clock Signals                                                                                                             |
| 82105274     | Granted | 7424653       | 5/9/2003    | 9/9/2008   | 10/434925          | US | System And Method For Error Capture And Logging In Computer Systems                                                                                                                                  |
| 82110452     | Granted | 6622261       | 8/1/2002    | 37880      | 10/210904          | US | PROCESS PAIR PROTECTION FOR COMPLEX APPLICATIONS                                                                                                                                                     |
| 82110518     | Granted | 6704764       | 7/14/1998   | 38055      | 09/115402          | US | METHOD AND APPARATUS FOR A SERVERLET SERVER CLASS                                                                                                                                                    |
| 82110704     | Granted | 6646984       | 3/15/1999   | 37936      | 09/268918          | US | NETWORK TOPOLOGY WITH ASYMMETRIC FABRICS                                                                                                                                                             |
| 82116446     | Granted | 5892895       | 1/28/1997   | 36256      | 08/790268          | US | METHOD AN APPARATUS FOR TOLERANCE OF LOST TIMER TICKS DURING RECOVERY OF A MULTI-PROCESSOR SYSTEM                                                                                                    |
| 82116821     | Granted | 5742135       | 6/28/1996   | 4/21/1998  | 08/693000          | US | SYSTEM FOR MAINTAINING POLARITY SYNCHRONIZATION DURING AMI DATA TRANSFER                                                                                                                             |
| 82117880     | Granted | 6920512       | 2/17/2004   | 7/19/2005  | 10/780395          | US | Computer Architecture And System For Efficient Management Of Bi-Directional Bus                                                                                                                      |
| 82117943     | Granted | 6668335       | 8/31/2000   | 12/23/2003 | 09/653643          | US | SYSTEM FOR RECOVERING DATA IN A MULTIPROCESSOR SYSTEM COMPRISING A CONDUCTION PATH FOR EACH BIT BETWEEN PROCESSORS WHERE THE PATHS ARE GROUPEL INTO SEPARATE BUNDLES ANDROUTED ALONG DIFFERENT PATHS |
| 82118192     | Granted | 6920052       | 9/26/2003   | 7/19/2005  | 10/672676          | US | DYNAMIC ISOLATING MOUNT FOR PROCESSOR PACKAGES                                                                                                                                                       |
| 82118633     | Granted | 6819322       | 1/4/2002    | 11/16/2004 | 10/038009          | US | Method And Apparatus For Detecting Potential Lock-up Conditions In A Video Graphics Controller                                                                                                       |
| 82119695     | Granted | 8370468       | 11/8/2006   | 2/5/2013   | 11/594633          | US | METHOD AND APPARATUS FOR CREATING A SECURE EMBEDDED I/O PROCESSOR FOR A REMOTE SERVER MANAGEMENT CONTROLLER                                                                                          |
| 82120070     | Granted | 6618264       | 11/28/2001  | 9/9/2003   | 09/995472          | US | Tool-less Coupling System For Electronic Modules                                                                                                                                                     |
| 82120190     | Granted | 6738868       | 1/7/2002    | 5/18/2004  | 10/042035          | US | SYSTEM FOR MINIMIZING DIRECTORY INFORMATION IN SCALABLE MULTIPROCESSOR SYSTEMS WITH LOGICALLY INDEPENDENT INPUT/OUTPUT NODES                                                                         |

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| 82120193     | Granted | 6640287       | 1/7/2002    | 10/28/2003 | 10/042009          | US | SCALABLE MULTIPROCESSOR SYSTEM AND CACHE COHERENCE METHOD INCORPORATING INVALID-TO-DIFFERENT REQUESTS                                                                                   |
| 82120196     | Granted | 6748498       | 1/7/2002    | 6/8/2004   | 10/042053          | US | SCALABLE MULTIPROCESSOR SYSTEM AND CACHE COHERENCE METHOD IMPLEMENTING STORE-CONDITIONAL MEMORY TRANSACTIONS WHILE AN ASSOCIATED DIRECT ENTRY IS ENCODED AS A COARSE BIT VECTOR         |
| 82120259     | Granted | 6731507       | 9/26/2001   | 5/4/2004   | 09/964306          | US | MODULAR AC INPUT SECTION FOR A POWER SUPPLY UNIT                                                                                                                                        |
| 82120319     | Granted | 6801811       | 12/27/2001  | 10/5/2004  | 10/033738          | US | SOFTWARE-DIRECTED, ENERGY-AWARE CONTROL OF DISPLAY                                                                                                                                      |
| 82120502     | Granted | 6654239       | 12/18/2001  | 11/25/2003 | 10/029739          | US | DOUBLE-ACTION CD DRIVE ELECT MECHANISM                                                                                                                                                  |
| 82120565     | Granted | 6915397       | 10/22/2001  | 38538      | 10/080961          | US | SYSTEM AND METHOD FOR GENERATING POINT IN TIME STORAGE COPY                                                                                                                             |
| 82120568     | Granted | 7290102       | 3/15/2005   | 10/30/2007 | 11/081061          | US | Point In Time Storage Copy                                                                                                                                                              |
| 82120631     | Granted | 6954528       | 12/28/2001  | 38636      | 10/034898          | US | Message Path Bypass For Intelligent Network Elements                                                                                                                                    |
| 82122005     | Granted | 7430662       | 4/10/2007   | 39721      | 11/786007          | US | Techniques For Initializing A Device On An Expansion Card                                                                                                                               |
| 82127183     | Granted | 6636921       | 2/18/2000   | 10/21/2003 | 09/507278          | US | SCSI REPEATER CIRCUIT WITH SCSI ADDRESS TRANSLATION AND ENABLE                                                                                                                          |
| 82127993     | Granted | 5999997       | 7/26/1996   | 12/7/1999  | 08/686813          | US | TWO COMPUTERS COOPERATING VIA INTERCONNECTED BUSES                                                                                                                                      |
| 82128188     | Granted | 5903906       | 6/5/1996    | 36291      | 08/559150          | US | RECEIVING A WRITE REQUEST THAT ALLOWS LESS THAN ONE CACHE LINE OF DATA TO BE WRITTEN AND ISSUING A SUBSEQUENT WRITE REQUEST THAT REQUIRES AT LEAST ONE CACHE LINE OF DATA TO BE WRITTEN |
| 82128311     | Granted | 5999295       | 3/29/1996   | 12/7/1999  | 08/626202          | US | STACKABLE NETWORK MODULES USING INFRARED COMMUNICATIONS                                                                                                                                 |
| 82128374     | Granted | 5987260       | 3/1/1996    | 11/16/1999 | 08/609423          | US | SYSTEM FOR COUPLING COMMUNICATION LINK TO PORT CONNECTOR INCLUDING PREDEFINED GROUND PIN WHEN PERIPHERAL IS CONNECTED TO PORT CONNECTOR AND NOT MOUNTED IN COMPARTMENT                  |
| 82128623     | Granted | 5796566       | 8/16/1996   | 8/18/1998  | 08/695829          | US | PRINTED CIRCUIT BOARD HAVING CONDUCTORS WHICH CAN BE DECOUPLED FOR ISOLATING INACTIVE INTEGRATED CIRCUITS CONNECTED THERETO                                                             |
| 82128872     | Granted | 5892926       | 12/30/1996  | 4/6/1999   | 08/777565          | US | DIRECT MEDIA INDEPENDENT INTERFACE CONNECTION SYSTEM FOR NETWORK DEVICES                                                                                                                |
| 82129184     | Granted | 6003139       | 1/27/1998   | 12/14/1999 | 09/013876          | US | COMPUTER SYSTEM INCLUDING POWER SUPPLY CIRCUIT WITH CONTROLLED OUTPUT POWER                                                                                                             |

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| 82129619     | Granted | 5954796       | 2/11/1997   | 9/21/1999  | 08/798962          | US | SYSTEM AND METHOD FOR AUTOMATICALLY AND DYNAMICALLY CHANGING AN ADDRESS ASSOCIATED WITH A DEVICE                                                       |
| 82129682     | Granted | 5999198       | 9/9/1997    | 12/7/1999  | 08/925772          | US | GRAPHICS ADDRESS REMAPPING TABLE ENTRY FEATURE FLAGS FOR CUSTOMIZING THE OPERATION OF MEMORY PAGES ASSOCIATED WITH AN ACCELERATED GRAPHICS PORT DEVICE |
| 82129685     | Granted | 5949436       | 9/30/1997   | 9/7/1999   | 08/941861          | US | ACCELERATED GRAPHICS PORT MULTIPLE ENTRY GART CACHE ALLOCATION SYSTEM AND METHOD                                                                       |
| 82131554     | Granted | 6272651       | 8/17/1998   | 8/7/2001   | 09/135274          | US | SYSTEM AND METHOD FOR IMPROVING PROCESSOR READ LATENCY IN A SYSTEM EMPLOYING ERROR CHECKING AND CORRECTION                                             |
| 82131617     | Granted | 6625710       | 3/15/2002   | 9/23/2003  | 10/098398          | US | SYSTEM, METHOD, AND APPARATUS FOR PROVIDING LINEARLY SCALABLE DYNAMIC MEMORY MANAGEMENT IN A MULTIPROCESSING SYSTEM                                    |
| 82132115     | Granted | 6615359       | 11/26/2001  | 9/2/2003   | 09/994174          | US | MODIFIED LICENSE KEY ENTRY FOR PRE-INSTALLATION OF SOFTWARE                                                                                            |
| 82132118     | Granted | 7529945       | 8/18/2003   | 39938      | 10/642900          | US | Installing Software In A System                                                                                                                        |
| 82132370     | Granted | 7552211       | 12/10/2002  | 6/23/2009  | 10/315749          | US | AUTOMATIC NOTIFICATION RULE DEFINITION FOR A NETWORK MANAGEMENT SYSTEM                                                                                 |
| 82132553     | Granted | 7379960       | 12/29/2003  | 39595      | 10/748346          | US | SYSTEM AND METHOD FOR MANAGING DATA FLOW AND MEASURING SERVICE IN A STORAGE NETWORK                                                                    |
| 82132616     | Granted | 6470429       | 12/29/2000  | 37551      | 09/752128          | US | SYSTEM FOR IDENTIFYING MEMORY REQUESTS AS NONCACHEABLE OR REDUCE CACHE COHERENCE DIRECTORY LOOKUPS AND BUS SNOOPS                                      |
| 82133306     | Granted | 6631437       | 4/6/2000    | 10/7/2003  | 09/543817          | US | METHOD AND APPARATUS FOR PROMOTING MEMORY READ COMMANDS                                                                                                |
| 82133366     | Granted | 6871286       | 7/29/1999   | 3/22/2005  | 09/363508          | US | METHOD AND APPARATUS FOR RESETTING PASSWORDS IN A COMPUTER SYSTEM                                                                                      |
| 82133426     | Granted | 6807590       | 4/4/2000    | 10/19/2004 | 09/542157          | US | DISCONNECTING A DEVICE ON A CACHE LINE BOUNDARY IN RESPONSE TO A WRITE COMMAND                                                                         |
| 82134800     | Granted | 6096637       | 7/28/1998   | 8/1/2000   | 09/124198          | US | ELECTROMIGRATION-RESISTANT VIA STRUCTURE                                                                                                               |
| 82135049     | Granted | 6883020       | 6/26/1997   | 4/19/2005  | 08/883241          | US | APPARATUS AND METHOD FOR FILTERING DOWNLOADED NETWORK SITES                                                                                            |
| 82135364     | Granted | 6079021       | 6/2/1997    | 6/20/2000  | 08/866673          | US | METHOD AND APPARATUS FOR STRENGTHENING PASSWORDS FOR PROTECTION OF COMPUTER SYSTEMS                                                                    |
| 82135736     | Granted | 6189083       | 2/26/1998   | 2/13/2001  | 09/030797          | US | METHOD AND APPARATUS FOR ACCESSING A CACHE MEMORY UTILIZATION DISTINGUISHING BIT RAMS                                                                  |
| 82136054     | Granted | 6104251       | 8/31/1998   | 8/15/2000  | 09/143945          | US | METHOD AND APPARATUS FOR PROVIDING TRANSIENT SUPPRESSION IN A CENTRAL                                                                                  |

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| 82136303     | Granted | 6028452       | 2/27/1998   | 2/22/2000  | 09/031943          | US | METHOD AND APPARATUS FOR A FAST VARIABLE PRECEDENCE PRIORITY ENCODER WITH OPTIMIZED ROUND ROBIN PRECEDENCE UPDATE SCHEME                    |
| 82136678     | Granted | 6738896       | 1/31/2000   | 5/18/2004  | 09/495190          | US | METHOD AND APPARATUS FOR DETERMINING AVAILABILITY OF A QUEUE WHICH ALLOWS RANDOM INSERTION                                                  |
| 82136984     | Granted | 6084455       | 8/13/1998   | 7/4/2000   | 09/133235          | US | HIGH-SPEED CMOS LATCH                                                                                                                       |
| 82136987     | Granted | 6324689       | 9/30/1998   | 11/27/2001 | 09/164255          | US | MECHANISM FOR RE-WRITING AN EXECUTABLE HAVING MIXED CODE AND DATA                                                                           |
| 82164146     | Granted | 5783771       | 10/6/1995   | 7/21/1998  | 08/550787          | US | EMI CHASSIS SEAM                                                                                                                            |
| 82164578     | Granted | 5901308       | 3/18/1996   | 5/4/1999   | 08/617014          | US | SOFTWARE MECHANISM FOR REDUCING EXCEPTIONS GENERATED BY SPECULATIVELY SCHEDULED INSTRUCTIONS                                                |
| 82165328     | Granted | 6128711       | 11/12/1996  | 10/3/2000  | 08/745553          | US | PERFORMANCE OPTIMIZATION AND SYSTEM BUS DUTY CYCLE REDUCTION BY I/O BRIDGE PARTIAL CACHE LINE WRITES                                        |
| 82165952     | Granted | 6075700       | 2/2/1999    | 6/13/2000  | 09/241351          | US | METHOD AND SYSTEM FOR CONTROLLING RADIO FREQUENCY RADIATION IN MICROELECTRONIC PACKAGES USING HEAT DISSIPATION STRUCTURES                   |
| 82166018     | Granted | 6781606       | 1/15/2002   | 8/24/2004  | 10/053034          | US | SYSTEM AND METHOD FOR DISPLAYING IMAGES USING FOVEAL VIDEO                                                                                  |
| 82166267     | Granted | 6694510       | 11/3/2000   | 2/17/2004  | 09/706050          | US | COLLECTION DRIVER FOR COLLECTING SYSTEM DATA USING RECORD BASED REQUESTS WITH TAG LISTS AND PAUSING ALL BUT ONE THREAD OF A COMPUTER SYSTEM |
| 82166327     | Granted | 7353353       | 6/3/2005    | 4/1/2008   | 11/144108          | US | FILE SECURITY MANAGEMENT                                                                                                                    |
| 82167830     | Granted | 7426189       | 7/15/2003   | 9/16/2008  | 10/620208          | US | Network Controller                                                                                                                          |
| 82174319     | Granted | 6922340       | 7/13/2004   | 7/26/2005  | 10/890938          | US | Stack Up Assembly                                                                                                                           |
| 82174322     | Granted | 6900987       | 7/13/2004   | 5/31/2005  | 10/890941          | US | Stack Up Assembly                                                                                                                           |
| 82174325     | Granted | 6947286       | 1/6/2005    | 9/20/2005  | 11/030774          | US | Stack Up Assembly                                                                                                                           |
| 82178690     | Granted | 7996825       | 10/31/2003  | 8/9/2011   | 10/699144          | US | Cross-file Inlining By Using Summaries And Golbal Worklist                                                                                  |
| 82178879     | Granted | 8161461       | 3/24/2005   | 4/17/2012  | 11/089109          | US | Systems And Methods For Evaluating Code Usage                                                                                               |
| 82179314     | Granted | 7406091       | 1/12/2004   | 7/29/2008  | 10/756668          | US | Distribution Of Communications Between Paths                                                                                                |
| 82181873     | Granted | 7330943       | 3/11/2005   | 2/12/2008  | 11/079548          | US | Storage Device Flow Control                                                                                                                 |
| 82182311     | Granted | 7328310       | 2/2/2005    | 2/5/2008   | 11/049454          | US | Method And System For Cache Utilization By Limiting Number Of Pending Cache Line Requests                                                   |
| 82183937     | Granted | 7265760       | 3/25/2004   | 9/4/2007   | 10/809261          | US | Method And System For Defining Border Tile Attributes For Polygons                                                                          |
| 82185371     | Granted | 7290176       | 7/31/2004   | 10/30/2007 | 10/909801          | US | METHOD AND SYSTEM FOR GENERATING STACKED REGISTER DUMPS FROM BACKING-STORE MEMORY                                                           |

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| 82188428     | Granted | 8315865       | 5/4/2004    | 11/20/2012 | 10/838561          | US | Method And Apparatus For Adaptive Conversation Detection                                                                        |
| 82189058     | Granted | 7280360       | 1/28/2005   | 10/9/2007  | 11/046452          | US | Employing Minimal Computation                                                                                                   |
| 82189430     | Granted | 7228518       | 1/31/2005   | 6/5/2007   | 11/047858          | US | Socket Adapted For Compressive Loading                                                                                          |
|              |         |               |             |            |                    |    | Method For Reducing The Size And Nanowire Length Utilizing Nanowire Crossbars Without Reducing The Number Of Nanowire Junctions |
| 82189433     | Granted | 7257016       | 5/24/2005   | 8/14/2007  | 11/136950          | US | Enhanced Nanowire-crossbar Latch Array                                                                                          |
| 82189805     | Granted | 7516151       | 11/1/2004   | 4/7/2009   | 10/979413          | US | Parallel Traversal Of A Dynamic List                                                                                            |
| 82190114     | Granted | 7363444       | 1/10/2005   | 4/22/2008  | 11/033343          | US | Method For Taking Snapshots Of Data                                                                                             |
| 82191737     | Granted | 7376799       | 7/21/2005   | 5/20/2008  | 11/186333          | US | System For Reducing The Latency Of Exclusive Read Requests In A Symmetric Multi-processing System                               |
| 82193051     | Granted | 8117215       | 9/24/2010   | 2/14/2012  | 12/889740          | US | Distributing Content Indices                                                                                                    |
| 82203605     | Granted | 7822857       | 9/7/2005    | 10/26/2010 | 11/221004          | US | Methods And Systems For Sharing Remote Access                                                                                   |
| 82207601     | Granted | 7391221       | 6/24/2005   | 6/24/2008  | 11/166825          | US | On-die Impedance Calibration                                                                                                    |
| 82220399     | Granted | 8027905       | 9/8/2006    | 9/27/2011  | 11/517705          | US | Generating Adjusted Bids Of Entities According To A New External Bid                                                            |
| 82223084     | Granted | 6240068       | 1/28/1998   | 5/29/2001  | 09/014686          | US | Method For Automatically Aggregating Objects                                                                                    |
| 82227953     | Granted | 8032585       | 3/9/2007    | 10/4/2011  | 11/684563          | US | Regression-based System And Method For Determining Resource Costs For Composite Transactions                                    |
| 82239752     | Granted | 8020053       | 10/29/2008  | 9/13/2011  | 12/260917          | US | On-line Memory Testing                                                                                                          |
| 82251176     | Granted | 8327721       | 10/26/2009  | 12/11/2012 | 12/605565          | US | Sensor Fabric For Shape Perception                                                                                              |
| 82254608     | Granted | 7243145       | 9/30/2002   | 7/10/2007  | 10/259786          | US | Generation Of Computer Resource Utilization Data Per Computer Application                                                       |
| 82266905     | Granted | 6089894       | 8/17/1998   | 7/18/2000  | 09/135251          | US | Test Connector                                                                                                                  |
| 82268285     | Granted | 6059583       | 5/28/1998   | 5/9/2000   | 09/086143          | US | INTERCONNECTION BETWEEN MEDIA CONNECTORS OF UNKNOWN INTERFACE STANDARDS AND A COMPUTER COMMUNICATIONS CARD                      |
| 82269656     | Granted | 6628623       | 5/24/1999   | 9/30/2003  | 09/317692          | US | Methods And Systems For Determining Switch Connection Topology On Ethernet Lans                                                 |
| 82269842     | Granted | 6109934       | 11/30/1998  | 8/29/2000  | 09/201647          | US | CONNECTOR FOR CONNECTING AN ELECTRIC DEVICE TO A COMMUNICATIONS CARD                                                            |
| 82270406     | Granted | 6925076       | 4/13/1999   | 8/2/2005   | 09/290941          | US | METHOD AND APPARATUS FOR PROVIDING A VIRTUAL DISTRIBUTED GATEKEEPER IN AN H 323 SYSTEM                                          |
| 82270463     | Granted | 6721394       | 12/9/1999   | 4/13/2004  | 09/458568          | US | Method for Reducing Noise from an Asymmetric Digital Subscriber Line Modem                                                      |
| 82270526     | Granted | 6189066       | 2/26/1999   | 2/13/2001  | 09/258500          | US | System And Method For Dynamically Selecting Interrupt Time Interval Threshold Parameters                                        |
| 82270595     | Granted | 6804230       | 11/3/1999   | 10/12/2004 | 09/432591          | US | Communication Device With Forwarding Database Having A Trie Search Facility                                                     |
| 82270718     | Granted | 6801605       | 9/13/2000   | 10/5/2004  | 09/660825          | US | Telephone Network Signal Conversion System                                                                                      |

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| 82271216     | Granted | 6731630       | 2/29/2000   | 5/4/2004   | 09/515797 US       | US | Flexible Dial Plan for a Data Network Telephony System                                                               |
| 82271342     | Granted | 6614350       | 11/8/2000   | 9/2/2003   | 09/709166 US       | US | METHOD AND SYSTEM FOR EFFECTING A SECURITY SYSTEM UPON MULTIPLE PORTABLE INFORMATION DEVICES                         |
| 82271780     | Granted | 6826174       | 3/2/2000    | 11/30/2004 | 09/516857 US       | US | VOICE-OVER-IP INTERFACE FOR STANDARD HOUSEHOLD TELEPHONE                                                             |
| 82271903     | Granted | 6826279       | 5/25/2000   | 11/30/2004 | 09/578545 US       | US | Base Band Echo Cancellation Using Laguerre Echo Estimation                                                           |
| 82272086     | Granted | 6795869       | 2/27/2001   | 9/21/2004  | 09/794841 US       | US | Video Signal Processing Method and Apparatus for Internet Appliances or Embedded Systems                             |
| 82272404     | Granted | 6816500       | 7/10/2000   | 11/9/2004  | 09/613070 US       | US | Apparatus, Method and System For Multimedia Access Network Channel Management                                        |
| 82272710     | Granted | 6807193       | 6/20/2000   | 10/19/2004 | 09/597841 US       | US | CABLE MODEM WITH DRIBBLE GRANT ACCESS SYSTEM AND METHOD                                                              |
| 82272776     | Granted | 6742187       | 9/15/2000   | 5/25/2004  | 09/663756 US       | US | Upstream Bandwidth allocation map (MAP)-Initiated channel change method for data-over-cable systems                  |
| 82272899     | Granted | 6577500       | 2/28/2001   | 6/10/2003  | 09/795506 US       | US | WIRELESS PC CARD                                                                                                     |
| 82273091     | Granted | 6842797       | 10/10/2000  | 1/11/2005  | 09/685287 US       | US | USB Adapter for Burst Mode Communications                                                                            |
| 82273400     | Granted | 6804804       | 7/23/2001   | 10/12/2004 | 09/909756 US       | US | Calculation and Transmission of Error Check Codes                                                                    |
| 82274084     | Granted | 6839239       | 7/17/2002   | 1/4/2005   | 10/198218 US       | US | ELECTRONIC DEVICE PACKAGING                                                                                          |
| 82948292     | Granted | 6567103       | 8/2/2000    | 5/20/2003  | 09/630449 US       | US | GRAPHICAL SEARCH RESULTS SYSTEM AND METHOD                                                                           |
| 82948306     | Granted | 6728704       | 8/27/2001   | 4/27/2004  | 09/940600 US       | US | METHOD AND APPARATUS FOR MERGING RESULT LISTS FROM MULTIPLE SEARCH ENGINES                                           |
| 82948641     | Granted | 6615111       | 11/9/2001   | 9/2/2003   | 10/014936 US       | US | Methods for automatically focusing the attention of a virtual robot interacting with users                           |
| 83138539     | Granted | 8810780       | 1/31/2013   | 8/19/2014  | 13/755801 US       | US | PLASMON RESONANCE BASED STRAIN GAUGE                                                                                 |
| 82068812     | Granted | 6776343       | 2/25/2000   | 8/17/2004  | 09/937021 US       | US | Intelligent Media Reader And Label Printer                                                                           |
| 82255424     | Granted | 6925375       | 3/20/2003   | 8/2/2005   | 10/392551 US       | US | SYSTEM AND METHOD FOR DETERMINING A PARAMETER SET FOR AN ENGINE CONTROLLER MODULE                                    |
| 81983090     | Granted | 7325237       | 12/29/2001  | 1/29/2008  | 10/037107 US       | US | SYSTEM HAVING CUSTOMIZATION MODULES TO PROVIDE CUSTOMIZATIONS                                                        |
| 81986528     | Granted | 8473922       | 9/19/2001   | 6/25/2013  | 09/955764 US       | US | Run-time Monitoring In Component-based Systems                                                                       |
| 82006568     | Granted | 8120618       | 6/11/2002   | 2/21/2012  | 10/170062 US       | US | System And Method For Visualization Of Objects Using Energy Minimization Of Customized Potential Functions           |
| 82035287     | Granted | 6230282       | 7/3/1998    | 5/8/2001   | 09/111250 US       | US | Checkpoint Computer System Utilizing A FIFO Buffer To Re-Synchronize The Memory Systems On The Detection Of An Error |
| 82037846     | Granted | 6154778       | 5/19/1998   | 11/28/2000 | 09/081265 US       | US | Utility-based Multi-category Quality-of-service Negotiation In Distributed Systems                                   |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------|
| 82040531     | Granted     | 6304906       | 8/6/1998    | 10/16/2001 | 09/130636          | US | METHOD AND SYSTEMS FOR ALLOWING DATA SERVICE SYSTEM TO PROVIDE CLASS-BASED SERVICES TO ITS USER                    |
| 82106081     | Granted     | 8799901       | 5/20/2004   | 8/5/2014   | 10/850131          | US | ESTABLISHING NEW SERVICE AS CONVERSATION BY REPLACING                                                              |
|              |             |               |             |            |                    |    | VARIABLES IN GENERIC SERVICE IN AN ORDER WITH V<br>ARIABLES FROM A<br>DECOUPLED METHOD OF LEGACY SERVICE (amended) |
| 82135865     | Granted     | 5987252       | 9/19/1997   | 11/16/1999 | 08/932575          | US | METHOD AND APPARATUS FOR STATICALLY ANALYZING A<br>COMPUTER PROGRAM FOR DATA DEPENDENCIES                          |
| 82172201     | Granted     | 7644410       | 11/23/2004  | 1/5/2010   | 10/997360          | US | Resource Management For Shared Computing Environment                                                               |
| 82179755     | Granted     | 7831499       | 10/10/2003  | 11/9/2010  | 10/683985          | US | Method And System For Controlling Feedback For An Online<br>Auction                                                |
| 82180754     | Granted     | 7827557       | 3/24/2004   | 11/2/2010  | 10/808073          | US | METHOD AND APPARATUS FOR ALLOCATING RESOURCES TO<br>APPLICATIONS USING A LINEARIZED OBJECTIVE FUNCTION             |
| 82181315     | Application |               | 12/16/2004  |            | 11/012266          | US | Method For Increasing Automation In Systems Through An<br>Object-oriented Data Model                               |
| 82183934     | Granted     | 7945569       | 3/31/2004   | 5/17/2011  | 10/814579          | US | METHOD AND APPARATUS FOR QUERYING SPATIAL DATA                                                                     |
| 82192115     | Granted     | 7756871       | 10/13/2004  | 7/13/2010  | 10/964094          | US | ARTICLE EXTRACTION                                                                                                 |
| 82193741     | Granted     | 7406452       | 3/17/2005   | 7/29/2008  | 11/083320          | US | Machine Learning                                                                                                   |
| 82202666     | Granted     | 8738387       | 10/29/2004  | 5/27/2014  | 10/976558          | US | System And Method For Determining An Element Value In<br>Private Datasets                                          |
| 82208906     | Published   |               | 4/29/2005   |            | 11/118178          | US | Providing Training Information For Training A Categorizer                                                          |
| 82212089     | Granted     | 8447587       | 1/31/2007   | 5/21/2013  | 11/700465          | US | Providing A Position Based Dictionary                                                                              |
| 82212719     | Granted     | 7594016       | 6/16/2005   | 9/22/2009  | 11/153925          | US | Calculating Numbers Of Servers For Tiers Of A Multi-tiered<br>System                                               |
| 82214030     | Application |               | 2/6/2006    |            | 11/349395          | US | Periodic Pattern Identification                                                                                    |
| 82220393     | Granted     | 8539349       | 10/31/2006  | 9/17/2013  | 11/555274          | US | Methods And Systems For Splitting A Chinese Character<br>Sequence Into Word Segments                               |
| 82220396     | Granted     | 7822675       | 10/24/2006  | 10/26/2010 | 11/552510          | US | GENERATION OF COST OR PRICE QUOTATIONS                                                                             |
| 82220711     | Granted     | 8086520       | 10/11/2006  | 12/27/2011 | 11/546042          | US | Constraint Satisfaction For Solutions To An Auction Winner-<br>determination Problem                               |
| 82229138     | Granted     | 7788064       | 4/30/2007   | 8/31/2010  | 11/796814          | US | FOCUS-BASED VISUAL ANALYTIC TECHNIQUES FOR<br>EXPLORING DATA RELATIONSHIPS                                         |
| 82234196     | Granted     | 9043267       | 7/30/2007   | 5/26/2015  | 11/830791          | US | METHODS AND SYSTEMS FOR MANAGING A DATA MINING<br>MODEL                                                            |
| 82242932     | Granted     | 8275762       | 10/21/2008  | 9/25/2012  | 12/255613          | US | Reverse Mapping Of Feature Space To Predict Execution In A<br>Database                                             |
| 82243058     | Granted     | 8627325       | 10/24/2008  | 1/7/2014   | 12/258226          | US | Scheduling Memory Usage Of A Workload                                                                              |
| 82244873     | Granted     | 8103480       | 10/31/2008  | 1/24/2012  | 12/262632          | US | Evaluating Service Level Agreement Violations                                                                      |

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| 82246745     | Published |               | 10/31/2008  |            | 12/263176 US       |    | Learning User Purchase Intent From User-centric Data                                              |
| 82248056     | Granted   | 8099453       | 1/22/2009   | 1/17/2012  | 12/357668 US       |    | System And Method For Data Clustering                                                             |
| 82248239     | Granted   | 8046373       | 1/25/2009   | 10/25/2011 | 12/359324 US       |    | Structured Parallel Data Intensive Computing                                                      |
| 82248491     | Published |               | 11/13/2009  |            | 12/618569 US       |    | Communication System With Nestable Delimited Streams                                              |
| 82248551     | Allowed   |               | 2/2/2009    |            | 12/364063 US       |    | Evaluation Of Database Query Plan Robustness Landmark                                             |
|              |           |               |             |            |                    |    | Using Operator Maps Or Query Maps                                                                 |
| 82250426     | Granted   | 8412755       | 6/23/2009   | 4/2/2013   | 12/490091 US       |    | PERMUTING RECORDS IN A DATABASE FOR LEAK DETECTION                                                |
|              |           |               |             |            |                    |    | AND TRACING                                                                                       |
| 82250801     | Granted   | 8402016       | 5/27/2009   | 3/19/2013  | 12/473065 US       |    | Fetching Optimization In Multi-way Pipelined Database Joins                                       |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82258103     | Published |               | 6/18/2009   |            | 12/487254 US       |    | Recommendation Based On Low-Rank Approximation                                                    |
| 82258106     | Published |               | 7/31/2009   |            | 12/533717 US       |    | Method And System For Characterizing Web Content                                                  |
| 82258541     | Granted   | 8719769       | 8/18/2009   | 5/6/2014   | 12/543357 US       |    | Quality Driven ETL Design Optimization                                                            |
| 82263224     | Published |               | 8/6/2010    |            | 12/852208 US       |    | MANAGING BUSINESS RELATIONSHIPS USING A THIRD-PARTY SERVICE                                       |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82263596     | Published |               | 10/18/2010  |            | 12/906739 US       |    | Acquiring Customer Insight In A Retail Environment                                                |
| 82263602     | Published |               | 9/23/2010   |            | 12/888800 US       |    | IDENTIFYING CORRELATED OPERATION MANAGEMENT EVENTS                                                |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82263662     | Published |               | 10/29/2010  |            | 12/916014 US       |    | DETERMINING MULTI-PROGRAMMING LEVELS                                                              |
| 82264844     | Granted   | 8898146       | 9/22/2010   | 11/25/2014 | 12/887895 US       |    | SYSTEM AND METHOD FOR COMPARING DATABASE QUERY PLANS                                              |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82264847     | Granted   | 8620609       | 10/7/2010   | 12/31/2013 | 12/900307 US       |    | METHOD AND APPARATUS FOR IDENTIFYING ANOMALIES OF A SIGNAL                                        |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82275710     | Granted   | 8626690       | 2/23/2011   | 1/7/2014   | 13/033443 US       |    | Pattern Recognition                                                                               |
| 82617315     | Granted   | 8868611       | 7/28/2011   | 10/21/2014 | 13/192602 US       |    | Data Management Systems for Efficient Storage and retrieval of Multi-Level/Multi-Dimensional Data |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82617318     | Published |               | 8/26/2011   |            | 13/218898 US       |    | Dynamic Reordering of Operations in A Query Plan                                                  |
| 82711710     | Published |               | 4/25/2011   |            | 13/093063 US       |    | DATA PREDICTION FOR BUSINESS PROCESS METRICS                                                      |
| 82748985     | Published |               | 10/27/2011  |            | 13/282632 US       |    | System for Providing Goods or Services Utilizing Petri Net Synthesis Algorithms (amended)         |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82775148     | Published |               | 10/10/2011  |            | 13/269627 US       |    | A Query to Streaming Data                                                                         |
| 82775168     | Published |               | 10/21/2011  |            | 13/278572 US       |    | Computing Predicted Data According to Weighted Peak Preservation and Time Distance Biasing        |
|              |           |               |             |            |                    |    |                                                                                                   |
| 82775188     | Published |               | 10/31/2011  |            | 13/285785 US       |    | Determining an Execution Ordering                                                                 |
| 82818912     | Granted   | 9009024       | 10/24/2011  | 4/14/2015  | 13/280040 US       |    | Performing Sentiment Analysis                                                                     |
| 82853038     | Published |               | 7/2/2009    |            | 13/260244 US       |    | METHOD AND APPARATUS FOR SUPPORTING A COMPUTER-BASED PRODUCT                                      |
| 82859659     | Published |               | 10/31/2011  |            | 13/286024 US       |    | CONSTRUCTING AN ANALYSIS OF A DOCUMENT                                                            |
| 82900197     | Granted   | 8943048       | 7/31/2012   | 1/27/2015  | 13/562752 US       |    | VISUALIZING TIME-DENSE EPISODES                                                                   |

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| 82900652     | Granted      | 8972579       | 9/6/2012    | 3/3/2015   | 13/605651          | US | Resource Sharing in Computer Clusters According to Objectives                                              |
| 82929162     | Granted      | 9037518       | 7/30/2012   | 4/19/2015  | 13/562058          | US | Classifying Unclassified Samples                                                                           |
| 82961625     | Published    |               | 4/26/2012   |            | 13/457093          | US | NESTING LEVEL                                                                                              |
| 82963045     | Published    |               | 4/30/2012   |            | 13/460072          | US | Adaptive Probabilistic Indexing with Skip Lists                                                            |
| 83013407     | Published    |               | 7/31/2012   |            | 13/563108          | US | ORGANIZING CONTENT WITHIN A CORPUS USING A CONCEPT GRAPH (as amended)                                      |
| 83013819     | Granted      | 8971665       | 7/31/2012   | 2/3/2015   | 13/562598          | US | Hierarchical cluster determination based on subgraph density                                               |
| 83019149     | Published    |               | 10/8/2012   |            | 13/646945          | US | ADJUSTMENT OF MAP REDUCE EXECUTION                                                                         |
| 83037403     | Published    |               | 7/31/2012   |            | 13/562800          | US | POPULATING PRODUCT RECOMMENDATION LIST                                                                     |
| 83108887     | Granted      | 8983933       | 12/21/2012  | 3/17/2015  | 13/723895          | US | COSTS OF OPERATIONS ACROSS COMPUTING SYSTEMS                                                               |
| 83139100     | Published    |               | 1/23/2013   |            | 13/748198          | US | METRIC BASED ON ESTIMATE VALUE                                                                             |
| 83139243     | Published    |               | 1/29/2013   |            | 13/752932          | US | TASK MANAGEMENT                                                                                            |
| 83204699     | Published    |               | 6/17/2013   |            | 13/919294          | US | READING OBJECT QUERIES                                                                                     |
| 83209130     | Allowed      |               | 4/30/2013   |            | 13/874342          | US | MANAGING A CATALOG OF SCRIPTS                                                                              |
| 83209668     | Published    |               | 4/5/2013    |            | 13/857716          | US | RECOVERING A FAILURE IN A DATA PROCESSING SYSTEM                                                           |
| 83209731     | Published    |               | 4/24/2013   |            | 13/869675          | US | Visual Analytics of Multivariate Data Using a Cell Based Calendar Matrix having a Visual Folding Mechanism |
|              |              |               |             |            |                    |    |                                                                                                            |
| 83209797     | Published    |               | 4/9/2013    |            | 13/859564          | US | OPTIMIZING ANALYTIC FLOWS                                                                                  |
| 83225944     | Allowed      |               | 10/14/2010  |            | 13/878473          | US | CONTINUOUS QUERYING OF A DATA STREAM                                                                       |
| 83566673     | Published    |               | 8/25/2011   |            | 14/237439          | US | Model-based stereoscopic and multiview cross-talk reduction                                                |
| 83696783     | Published    |               | 10/30/2013  |            | 14/067328          | US | MULTI-ATTRIBUTE VISUALIZATION INCLUDING MULTIPLE COORDINATED VIEWS OF NON-OVERLAPPED CELLS                 |
| 84080924     | Published    |               | 7/30/2012   |            | 14/397737          | US | SEARCH METHOD                                                                                              |
| 84081222     | Published    |               | 7/31/2012   |            | 14/397640          | US | Concept Categorization                                                                                     |
| 84116410     | Published    |               | 6/1/2012    |            | 14/404915          | US | SHARING INFORMATION ABOUT RESOURCES IN A COLLABORATIVE ENVIRONMENT                                         |
| 84140177     | Published    |               | 10/25/2012  |            | 14/418307          | US | EVENT CORRELATION                                                                                          |
| 84210227     | Application  |               | 10/18/2012  |            | 14/435685          | US | COMMUNICATING TUPLES IN A MESSAGE                                                                          |
| 84223019     | Application  |               | 10/19/2012  |            | 14/435809          | US | Performing A Search Based On Entity-Related Criteria                                                       |
| 84304307     | Application  |               | 2/27/2013   |            | 14/759966          | US | Generating a social circle for a user                                                                      |
| 90048639     | Acknowledged |               |             |            |                    | US | MANAGING A CATALOG OF SCRIPTS                                                                              |
| 90068098     | Application  |               | 3/29/2013   |            | 14/780641          | US | BATCHING TUPLES                                                                                            |
| 82065191     | Granted      | 7263361       | 10/26/2001  | 8/28/2007  | 09/983817          | US | Provision Of Services Via An Information Technology Network                                                |
| 82099094     | Granted      | 8806222       | 1/20/2006   | 8/12/2014  | 11/335824          | US | Method And System For Contained Cryptographic Separation                                                   |

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| 82105835     | Granted     | 7574596       | 4/22/2004   | 8/11/2009  | 10/831549          | US | Cryptographic Method And Apparatus                                                                                     |
| 82169201     | Granted     | 7373665       | 10/31/2003  | 5/13/2008  | 10/697645          | US | PROPAGATION OF VIRUSES THROUGH AN INFORMATION TECHNOLOGY NETWORK                                                       |
| 82188806     | Granted     | 8984291       | 3/23/2006   | 3/17/2015  | 11/389336          | US | Access To A Computing Environment By Computing Devices                                                                 |
| 82191986     | Granted     | 7949753       | 3/16/2005   | 5/24/2011  | 11/081248          | US | Provision Of Resource Allocation Information                                                                           |
| 82219397     | Allowed     |               | 6/16/2006   |            | 11/455231          | US | Method And Device Using One-time Pad Data                                                                              |
| 82237817     | Published   |               | 12/20/2007  |            | 12/808233          | US | MODELLING COMPUTER BASED BUSINESS PROCESS AND SIMULATING OPERATION                                                     |
| 82243181     | Granted     | 8224624       | 10/14/2008  | 41107      | 12/250748          | US | Using Application Performance Signatures For Characterizing Application Updates                                        |
| 82263722     | Published   |               | 8/25/2011   |            | 13/217892          | US | SYSTEM AND METHOD TO INDICATE CODE BLOCK EXECUTION                                                                     |
| 82276151     | Granted     | 8397302       | 10/29/2010  | 3/12/2013  | 12/916265          | US | SYSTEM AND METHOD FOR ANALYZING A PROCESS                                                                              |
| 82276457     | Granted     | 7516321       | 3/8/2004    | 4/7/2009   | 10/797715          | US | Method, System And Device For Enabling Delegation Of Authority And Access Control Methods Based On Delegated Authority |
| 82863217     | Granted     | 9053577       | 10/27/2011  | 6/9/2015   | 13/282564          | US | REFLECTING VALUES FOR A METRIC IN A DISPLAY                                                                            |
| 82890041     | Published   |               | 1/10/2012   |            | 13/347098          | US | SECURITY MODEL ANALYSIS                                                                                                |
| 82900698     | Granted     | 9064240       | 4/27/2012   | 6/23/2015  | 13/457614          | US | APPLICATION BASED ON NODE TYPES ASSOCIATED WITH IMPLICIT BACKTRACKING                                                  |
| 83012923     | Published   |               | 7/31/2012   |            | 13/562696          | US | DATA BLOCK ACCESS CONTROL                                                                                              |
| 83766395     | Allowed     |               | 7/11/2011   |            | 14/125685          | US | POLICY-BASED DATA MANAGEMENT                                                                                           |
| 84037080     | Published   |               | 3/8/2012    |            | 14/381453          | US | MODIFYING VIRTUAL MACHINE COMMUNICATIONS                                                                               |
| 84266474     | Application |               | 5/29/2015   |            | 14/725080          | US | Propagation Of Viruses Through An Information Technology Network                                                       |
| 82186622     | Granted     | 7644146       | 6/2/2004    | 1/5/2010   | 10/859578          | US | SYSTEM AND METHOD FOR DISCOVERING COMMUNITIES IN NETWORKS                                                              |
| 82263473     | Granted     | 8428621       | 7/30/2010   | 4/23/2013  | 12/847058          | US | LOCATION-BASED AUDIO SERVICE                                                                                           |
| 83011240     | Published   |               | 1/15/2013   |            | 13/742093          | US | Creating User Skill Profiles Through Use Of An Enterprise Social Network                                               |
| 83011263     | Granted     | 8589292       | 8/29/2012   | 11/19/2013 | 13/597516          | US | CREATING A MARKET FOR UNBIASED PRIVATE INDIVIDUAL DATA                                                                 |
| 82068686     | Granted     | 6747979       | 10/27/1999  | 6/8/2004   | 09/427705          | US | METHOD AND APPARATUS FOR BRIDGING BETWEEN NETWORKS                                                                     |
| 82068689     | Granted     | 7359394       | 8/15/2003   | 4/15/2008  | 10/641039          | US | METHOD AND APPARATUS FOR BRIDGING BETWEEN NETWORKS                                                                     |
| 82106519     | Granted     | 8560629       | 4/25/2003   | 41562      | 10/423540          | US | Method Of Delivering Content In A Network                                                                              |

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| 82195733     | Granted   | 8205003       | 11/5/2004   | 6/19/2012  | 10/982136          | US | Methods And Systems For Controlling The Admission Of Media Content Into A Network                                             |
| 82089791     | Granted   | 6854092       | 8/12/2002   | 2/8/2005   | 10/216987          | US | Reducing Variation In Randomized Nanoscale Circuit Connections                                                                |
| 82096217     | Granted   | 7307571       | 4/27/2005   | 39427      | 11/116539          | US | Binary Signal Converters For Distinguishing Direct Signals Carried By Nanowires                                               |
| 82168640     | Granted   | 8384136       | 10/19/2006  | 41331      | 11/584028          | US | Demultiplexed Nanowire Sensor Array For Detection Of Chemical And Biological Species                                          |
| 82185995     | Granted   | 7307345       | 11/1/2005   | 12/11/2007 | 11/264464          | US | CROSSBAR-ARRAY DESIGNS AND WIRE ADDRESSING METHODS THAT TOLERATE MISALIGNMENT OF ELECTRICAL COMPONENTS AT WIRE OVERLAP POINTS |
| 82189427     | Granted   | 7307448       | 5/24/2005   | 12/11/2007 | 11/136935          | US | Interconnectable Nanoscale Computational Stages                                                                               |
| 82195859     | Granted   | 8112700       | 1/23/2008   | 40946      | 12/011175          | US | Nanoscale Interconnection Interface                                                                                           |
| 82209347     | Granted   | 7381658       | 7/5/2005    | 39602      | 11/174896          | US | Encapsulation Of Nano-dimensional Structures By Oxidation                                                                     |
| 82223516     | Granted   | 7958071       | 4/19/2007   | 6/7/2011   | 11/788447          | US | Computational Nodes And Computational-node Networks That Include Dynamical-nanodevice Connections                             |
| 82257980     | Granted   | 8050078       | 10/27/2009  | 40848      | 12/606871          | US | NANOWIRE-BASED MEMRISTOR DEVICES                                                                                              |
| 82260287     | Published |               | 5/17/2010   |            | 12/781441          | US | MEMRISTOR ADJUSTMENT USING STORED CHARGE                                                                                      |
| 82260293     | Granted   | 8451644       | 6/29/2010   | 41422      | 12/825607          | US | NON-VOLATILE SAMPLER                                                                                                          |
| 82261847     | Granted   | 8415652       | 6/21/2010   | 41373      | 12/819763          | US | MEMRISTORS WITH A SWITCHING LAYER COMPRISING A COMPOSITE OF MULTIPLE PHASES                                                   |
| 82263347     | Granted   | 8274813       | 7/16/2010   | 9/25/2012  | 12/837903          | US | MEMRISTIVE NEGATIVE DIFFERENTIAL RESISTANCE DEVICE                                                                            |
| 82264598     | Granted   | 8253443       | 10/26/2010  | 8/28/2012  | 12/912647          | US | Interconnection Architectures For Multilayer Crossbar Circuits                                                                |
| 82264601     | Granted   | 8619457       | 9/13/2010   | 12/31/2013 | 12/880871          | US | THREE-DEVICE NON-VOLATILE MEMORY CELL                                                                                         |
| 82264664     | Granted   | 8264868       | 10/25/2010  | 9/11/2012  | 12/911283          | US | MEMORY ARRAY WITH METAL-INSULATOR TRANSITION SWITCHING DEVICES                                                                |
| 82690133     | Granted   | 8803212       | 8/15/2011   | 41863      | 13/209606          | US | THREE-DIMENSIONAL CROSSBAR ARRAY                                                                                              |
| 82747671     | Granted   | 8810074       | 1/30/2009   | 41870      | 13/130797          | US | Multi-way Electrical Switch                                                                                                   |
| 82747717     | Granted   | 8471234       | 1/20/2009   | 41450      | 13/130815          | US | Multilayer Memristive Devices                                                                                                 |
| 82756396     | Granted   | 8837196       | 8/25/2011   | 41898      | 13/217887          | US | A SINGLE LAYER COMPLEMENTARY MEMORY CELL                                                                                      |
| 82835640     | Granted   | 8854860       | 1/31/2012   | 41919      | 13/362538          | US | METAL-INSULATOR TRANSITION LATCH                                                                                              |
| 82853084     | Granted   | 8519372       | 7/30/2009   | 41513      | 13/259173          | US | ELECTROFORMING-FREE NANOSCALE SWITCHING DEVICE                                                                                |
| 82854037     | Published |               | 1/29/2010   |            | 13/260019          | US | THREE DIMENSIONAL MULTILAYER CIRCUIT                                                                                          |
| 82925126     | Granted   | 8809158       | 3/12/2010   | 41870      | 13/384000          | US | DEVICE HAVING MEMRISTIVE MEMORY                                                                                               |
| 82929182     | Granted   | 8767438       | 3/19/2012   | 41821      | 13/424034          | US | MEMELECTRONIC DEVICE                                                                                                          |
| 82940735     | Granted   | 8570138       | 3/3/2010    | 10/29/2013 | 13/387680          | US | RESISTIVE SWITCHES                                                                                                            |

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| 82963463     | Granted     | 8525553       | 4/30/2012   | 9/3/2013   | 13/459877          | US | NEGATIVE DIFFERENTIAL RESISTANCE COMPARATOR CIRCUITS                                                                                                                               |
| 82978190     | Granted     | 9036395       | 6/26/2012   | 5/19/2015  | 13/533699          | US | PROGRAMMED-STATE DETECTION IN MEMRISTOR STACKS                                                                                                                                     |
| 83211254     | Granted     | 8872153       | 9/27/2010   | 41940      | 13/822227          | US | DEVICE STRUCTURE FOR LONG ENDURANCE MEMRISTOR                                                                                                                                      |
| 83786501     | Allowed     |               | 7/20/2011   |            | 14/233075          | US | MEMRISTOR STRUCTURE WITH A DOPANT SOURCE                                                                                                                                           |
| 83858257     | Granted     | 9082533       | 10/21/2011  | 42199      | 14/345293          | US | MEMRISTIVE ELEMENT BASED ON HETERO-JUNCTION ON A SUBSTRATE                                                                                                                         |
| 83960017     | Published   |               | 2/29/2012   |            | 14/371492          | US | Memristor with Channel Region in Thermal Equilibrium with Containing Region                                                                                                        |
| 84242398     | Published   |               | 5/14/2015   |            | 14/712554          | US | MEMORY CONTROLLER USING CRISSCROSS ERROR-CORRECTING CODES                                                                                                                          |
| 90050926     | Application |               | 9/4/2015    |            | 14/845636          | US | MEMRISTIVE DEVICES WITH LAYERED JUNCTIONS AND METHODS FOR FABRICATING THE SAME                                                                                                     |
| 90050932     | Application |               | 9/4/2015    |            | 14/845735          | US | HIGH-RELIABILITY HIGH-SPEED MEMRISTOR                                                                                                                                              |
| 90065994     | Instructed  |               |             |            |                    | US | MEMRISTOR STRUCTURE WITH A DOPANT SOURCE                                                                                                                                           |
| 81989396     | Granted     | 7831731       | 6/12/2001   | 40491      | 09/880631          | US | METHOD AND SYSTEM FOR A MODULAR TRANSMISSION CONTROL PROTOCOL (TCP) RARE-HANDOFF DESIGN IN A STREAMS BASED TRANSMISSION CONTROL PROTOCOL/INTERNET PROTOCOL (TCP/IP) IMPLEMENTATION |
| 81994646     | Granted     | 7349392       | 9/14/2001   | 39532      | 09/953541          | US | Assigning IP Addresses In An Internet Data Center                                                                                                                                  |
| 81998198     | Granted     | 7594032       | 11/7/2002   | 40078      | 10/289282          | US | Method And System For Communicating Information Between A Switch And A Plurality Of Servers In A Computer Network                                                                  |
| 81998201     | Granted     | 8095686       | 7/21/2009   | 40918      | 12/506496          | US | Method And System For Communicating Information Between A Switch And A Plurality Of Servers In A Computer Network                                                                  |
| 82004693     | Granted     | 7398388       | 2/28/2002   | 39637      | 10/084436          | US | Increasing Peer Privacy                                                                                                                                                            |
| 82080047     | Granted     | 7218917       | 1/15/2002   | 39217      | 10/051857          | US | METHOD FOR SEARCHING NODES FOR INFORMATION                                                                                                                                         |
| 82136489     | Granted     | 6243761       | 3/26/1998   | 37047      | 09/048652          | US | A METHOD FOR DYNAMICALLY ADJUSTING MULTIMEDIA CONTENT OF A WEB PAGE BY A SERVER IN ACCORDING TO NETWORK PATH CHARACTERISTICS BETWEEN CLIENT AND SERVER                             |
| 82199105     | Granted     | 7644167       | 10/8/2004   | 40183      | 10/960605          | US | Identifying A Service Node In A Network                                                                                                                                            |
| 82224575     | Granted     | 8660018       | 7/31/2006   | 41695      | 11/496409          | US | Machine Learning Approach For Estimating A Network Path Property                                                                                                                   |
| 82245617     | Granted     | 8514776       | 4/30/2009   | 41506      | 12/433717          | US | Determining A Metric Region In A Wireless Network                                                                                                                                  |
| 82250240     | Granted     | 8493947       | 4/30/2009   | 41478      | 12/433644          | US | SELECTING AN ACCESS POINT IN A WIRELESS NETWORK USING A DATA FLOW METRIC (as amended)                                                                                              |
| 82258169     | Granted     | 8175107       | 8/18/2009   | 41037      | 12/543118          | US | Network Routing Based On MAC Address Subnetting                                                                                                                                    |

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| 82259477     | Granted     | 8391222       | 12/1/2009   | 41338      | 12/628830 US       | US | Channel Assignment For A Wireless Network                                                                                                                                                   |
| 82261040     | Granted     | 8359376       | 4/20/2010   | 41296      | 12/763647 US       | US | Proactive Sending Of An Ip-to-mac Address Binding For Address                                                                                                                               |
| 82911309     | Granted     | 8943499       | 4/30/2012   | 42031      | 13/460836 US       | US | Fan-in Node<br>PROVIDING A VIRTUAL NETWORK TOPOLOGY IN A DATA CENTER                                                                                                                        |
| 82916241     | Published   |               | 4/27/2012   |            | 13/458137 US       | US | UPDATING VIRTUAL NETWORK MAPS                                                                                                                                                               |
| 82916424     | Granted     | 8774195       | 41029       | 41828      | 13/460535 US       | US | USING PROBABILISTIC VALUES FOR ROUTING DATA PACKETS<br>ON A DATA CENTER NETWORK                                                                                                             |
| 82990991     | Published   |               | 10/15/2012  |            | 13/652096 US       | US | CONVERTING ADDRESSES FOR NODES OF A DATA CENTER<br>NETWORK INTO COMPACT IDENTIFIERS FOR DETERMINING<br>FLOW KEYS FOR RECEIVED DATA PACKETS                                                  |
| 83501163     | Granted     | 9160761       | 7/31/2013   | 10/13/2015 | 13/955552 US       | US | SELECTION OF A COUNTERMEASURE                                                                                                                                                               |
| 83814341     | Granted     | 9143218       | 9/23/2011   | 9/22/2015  | 14/240533 US       | US | Extrapolating Channel State Information ("CSI") Estimates<br>From Multiple Packets Sent Over Different Frequency<br>Channels to Generate a Combined CSI Estimate for a MIMO-<br>OFDM System |
| 84049818     | Allowed     |               | 3/14/2012   |            | 14/384986 US       | US | REPLACEABLE MODULAR OPTICAL CONNECTION ASSEMBLY                                                                                                                                             |
| 84049835     | Published   |               | 3/14/2012   |            | 14/384996 US       | US | Allocating Bandwidth in a Network                                                                                                                                                           |
| 84077618     | Published   |               | 7/31/2012   |            | 14/391838 US       | US | MANAGEMENT OF MODULATION AND CODING SCHEME<br>IMPLEMENTATION                                                                                                                                |
| 84084219     | Published   |               | 4/30/2012   |            | 14/395625 US       | US | Globally managed rate-limit assignment for multi-tenant<br>segregation using distributed rate limiters                                                                                      |
| 84103214     | Published   |               | 7/31/2012   |            | 14/400367 US       | US | WIRELESS ACCESS POINT CELL ID INSERTION IN FRAME<br>HEADER                                                                                                                                  |
| 84312631     | Application |               | 1/14/2013   |            | 14/760693 US       | US | WIRELESSLY TRANSMITTING MULTI-CAST SIGNAL USING<br>RATELESS CODES                                                                                                                           |
| 84312671     | Application |               | 1/18/2013   |            | 14/762192 US       | US | PREVENTING AN INPUT/OUTPUT BLOCKING ATTACK TO A<br>WIRELESS ACCESS POINT                                                                                                                    |
| 90017112     | Application |               | 1/31/2013   |            | 14/765265 US       | US | INCREMENTAL UPDATE OF A SHAPE GRAPH                                                                                                                                                         |
| 90056963     | Application |               | 3/15/2013   |            | 14/777451 US       | US | CLOUD-BASED CONNECTIVITY                                                                                                                                                                    |
| 90068284     | Application |               | 3/28/2013   |            | 14/780775 US       | US | MAKING A FRAME RECEIVE DECISION IN A RECEIVER PHY<br>LAYER                                                                                                                                  |
| 82096283     | Granted     | 7560726       | 2/11/2003   | 7/14/2009  | 10/364987 US       | US | Quantum Information Processing Using Electromagnetically<br>Induced Transparency                                                                                                            |
| 82100279     | Granted     | 7483142       | 5/3/2006    | 39840      | 11/417614 US       | US | Security Systems And Monitoring Methods Using Quantum<br>States                                                                                                                             |
| 82174133     | Granted     | 7449672       | 4/30/2004   | 11/11/2008 | 10/837129 US       | US | CONVERSION OF QUANTUM INFORMATION FROM ONE<br>PHOTONIC REPRESENTATION TO ANOTHER PHOTONIC<br>REPRESENTATION                                                                                 |

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| 82178438     | Granted | 7623783       | 8/10/2004   | 40141      | 10/915052          | US | System And Method Of Self-configuring Optical Communication Channels Between Arrays Of Emitters And Detectors |
| 82178441     | Granted | 7229218       | 9/20/2004   | 39245      | 10/945007          | US | Apparatus And Method Of Providing An Optical Connection Between PC Boards For Optical Communication           |
| 82178444     | Granted | 7623793       | 8/10/2004   | 40141      | 10/915612          | US | System And Method Of Configuring Fiber Optic Communication Channels Between Arrays Of Emitters And Detectors  |
| 82181504     | Granted | 7228016       | 5/11/2005   | 39238      | 11/127869          | US | Evanescent Nanosensor Using An Optical Resonator                                                              |
| 82185809     | Granted | 7315663       | 6/10/2005   | 1/1/2008   | 11/150332          | US | Electronically Controlled Photonic Crystal Optical Switch                                                     |
| 82198856     | Granted | 7554080       | 7/13/2005   | 6/30/2009  | 11/632596          | US | ENTANGLEMENT PROCESSES AND SYSTEM                                                                             |
| 82201979     | Granted | 7236138       | 9/24/2004   | 39259      | 10/949158          | US | Externally Powered Negatively Refracting Photonic Bandgap Medium                                              |
| 82208288     | Granted | 7515330       | 1/30/2007   | 4/7/2009   | 11/699500          | US | METAMATERIAL STRUCTURES FOR LIGHT PROCESSING AND METHOD OF PROCESSING LIGHT                                   |
| 82208345     | Granted | 7570849       | 6/21/2005   | 8/4/2009   | 11/158666          | US | Integrated Circuit Device Having Optically Coupled Layers                                                     |
| 82210094     | Granted | 8017239       | 3/31/2006   | 9/13/2011  | 11/395698          | US | Metamaterials And Methods Of Making The Same                                                                  |
| 82213592     | Granted | 7593170       | 10/20/2006  | 9/22/2009  | 11/584320          | US | Random Negative Index Material Structures In A Three-dimensional Volume                                       |
| 82218644     | Granted | 7805031       | 6/2/2009    | 9/28/2010  | 12/476723          | US | METHODS FOR FABRICATING COLOR-CENTER-BASED QUANTUM COMPUTER ARCHITECTURES                                     |
| 82219082     | Granted | 7609432       | 10/13/2006  | 10/27/2009 | 11/549283          | US | Nanowire-based Device And Method Of Making Same                                                               |
| 82219085     | Granted | 8154127       | 7/30/2007   | 4/10/2012  | 11/829995          | US | OPTICAL DEVICE AND METHOD OF MAKING THE SAME                                                                  |
| 82223579     | Granted | 7427525       | 10/13/2006  | 9/23/2008  | 11/580344          | US | Methods For Coupling Diamond Structures To Photonic Devices                                                   |
| 82223582     | Granted | 8039845       | 8/8/2008    | 10/18/2011 | 12/228039          | US | METHODS FOR COUPLING DIAMOND STRUCTURES TO PHOTONIC DEVICE                                                    |
| 82224767     | Granted | 7964925       | 1/17/2007   | 6/21/2011  | 11/654046          | US | Photodiode Module And Apparatus Including Multiple Photodiode Modules                                         |
| 82224770     | Granted | 7965381       | 10/13/2006  | 6/21/2011  | 11/580646          | US | SELF-ALIGNED, SUB-WAVELENGTH OPTICAL LITHOGRAPHY                                                              |
| 82226948     | Granted | 7763973       | 4/5/2007    | 7/27/2010  | 11/784463          | US | Integrated Heat Sink For A Microchip                                                                          |
| 82226951     | Granted | 7720326       | 1/29/2007   | 5/18/2010  | 11/699291          | US | Nanowire-based Photodetectors                                                                                 |
| 82234628     | Granted | 8009991       | 10/24/2007  | 8/30/2011  | 11/977501          | US | Dynamic Optical Signal Tracking On A Detector Array In A Free Space Optical Communication System              |
| 82234940     | Granted | 7972882       | 6/5/2009    | 40729      | 12/479604          | US | Microresonator Systems And Methods Of Fabricating The Same                                                    |
| 82239809     | Granted | 8179935       | 10/31/2008  | 5/15/2012  | 12/263405          | US | TUNABLE OPTICAL RESONATOR                                                                                     |
| 82239815     | Granted | 8275266       | 10/31/2008  | 9/25/2012  | 12/263360          | US | Free Space Optical Interconnect With Asymmetric Light Pipes                                                   |
| 82242683     | Granted | 8009363       | 4/2/2008    | 8/30/2011  | 12/922103          | US | PRISM BEAMSPLITTERS                                                                                           |

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| 82245494     | Granted     | 8171051       | 10/15/2008  | 5/1/2012   | 12/288113          | US | Quantum-based Oblivious Transfer And Private Data Sampling Protocols And Systems For Performing The Same |
| 82249988     | Granted     | 8345349       | 5/27/2009   | 1/1/2013   | 12/472600          | US | COMPACT OPTICAL RESONATORS                                                                               |
| 82258667     | Granted     | 8203137       | 7/13/2009   | 6/19/2012  | 12/501844          | US | PHOTONIC STRUCTURE                                                                                       |
| 82260479     | Granted     | 8766092       | 10/14/2009  | 7/1/2014   | 12/579407          | US | ENERGY COLLECTION SYSTEMS AND METHODS                                                                    |
| 82261787     | Granted     | 8300996       | 7/30/2010   | 10/30/2012 | 12/847854          | US | OPTICAL BUS FOR OPTICAL SIGNAL BROADCASTING                                                              |
| 82395249     | Granted     | 8891577       | 5/6/2008    | 11/18/2014 | 12/990940          | US | SYSTEM AND METHOD FOR MICRO RING LASER                                                                   |
| 82405551     | Granted     | 8571366       | 5/9/2008    | 10/29/2013 | 12/991644          | US | PROXIMITY FREE SPACE OPTICAL INTERCONNECT                                                                |
| 82634152     | Granted     | 8446661       | 8/26/2008   | 5/21/2013  | 13/058495          | US | TUNABLE NANOWIRE RESONANT CAVITY FOR OPTICAL MODULATION                                                  |
| 82634175     | Granted     | 8492700       | 8/27/2008   | 7/23/2013  | 13/058502          | US | Dynamic Impedance Receiver Circuit For Ultrafast Low-power Photodetector                                 |
| 82651155     | Granted     | 8138013       | 2/14/2011   | 40988      | 13/026761          | US | METHOD AND APPARATUS FOR FORMING A PHOTODIODE                                                            |
| 82716705     | Allowed     |               | 10/31/2008  |            | 13/126837          | US | OPTICAL CONNECTOR INTERCONNECTION SYSTEM AND METHOD                                                      |
| 82755895     | Granted     | 8699831       | 10/28/2011  | 4/15/2014  | 13/284164          | US | PROCESS POLING FOR MATERIAL CONFIGURATION                                                                |
| 82755915     | Published   |               | 10/25/2011  |            | 13/280831          | US | PLANAR REFLECTIVE DEVICES                                                                                |
| 82790104     | Granted     | 8611707       | 1/9/2009    | 12/17/2013 | 13/143899          | US | SYSTEM AND METHODS FOR ROUTING OPTICAL SIGNALS                                                           |
| 82852248     | Granted     | 8389388       | 4/30/2009   | 3/5/2013   | 13/258404          | US | PHOTONIC DEVICE AND METHOD OF MAKING THE SAME                                                            |
| 82902023     | Granted     | 8761217       | 4/6/2012    | 6/24/2014  | 13/441102          | US | MODAL FILTERS FOR MODULATABLE SOURCES                                                                    |
| 82931452     | Granted     | 9014526       | 3/31/2010   | 42115      | 13/387036          | US | WAVEGUIDE SYSTEM AND METHODS                                                                             |
| 82963105     | Published   |               | 4/26/2012   |            | 13/456767          | US | OPTICAL SWITCH                                                                                           |
| 83235828     | Allowed     |               | 10/27/2010  |            | 13/881004          | US | RECEIVERS AND TRANSCIVERS FOR OPTICAL MULTIBUS SYSTEMS                                                   |
| 83791138     | Granted     | 9052475       | 7/29/2011   | 42164      | 14/234975          | US | FIBER OPTICS CONNECTORS                                                                                  |
| 83821171     | Granted     | 9093428       | 8/31/2011   | 42213      | 14/342174          | US | Thermal Shunt                                                                                            |
| 83835858     | Published   |               | 9/15/2011   |            | 14/342762          | US | VERTICAL-CAVITY SURFACE-EMITTING LASERS                                                                  |
| 83930213     | Published   |               | 40886       |            | 14/357776          | US | Control of Light Wavefronts                                                                              |
| 83948865     | Published   |               | 1/18/2012   |            | 14/364725          | US | INTEGRATED SUB-WAVELENGTH GRATING ELEMENT                                                                |
| 84235803     | Application |               | 7/16/2013   |            | 14/439442          | US | Window of Optical Waveguide                                                                              |
| 82631613     | Granted     | 8930885       | 10/30/2008  | 1/6/2015   | 13/123657          | US | RECONFIGURING A MODEL                                                                                    |
| 84113327     | Application |               | 1/28/2015   |            | 14/607244          | US | DISTRIBUTED MULTI-SITE CLOUD DEPLOYMENT                                                                  |
| 84256799     | Application |               | 6/3/2015    |            | 14/729453          | US | INPUT/OUTPUT OPERATIONS AT A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER                                    |
| 82268282     | Granted     | 5989042       | 4/3/1998    | 11/23/1999 | 09/054652          | US | ELECTRICAL CONNECTOR FOR USE BETWEEN SHIELDED MEDIA CONNECTORS AND COMPUTER COMMUNICATIONS CARDS         |
| 82274771     | Granted     | 7180895       | 12/31/2001  | 2/20/2007  | 10/036638          | US | System and Method for Classifying Network Packets with Packet Content                                    |

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| 822/4774     | Granted     | 7239639       | 12/27/2001  | 7/3/2007   | 10/034435          | US | System and Method for Dynamically Constructing Packet Classification Rules                                        |
| 822/4900     | Granted     | 8000244       | 7/31/2008   | 8/16/2011  | 12/183458          | US | Shared Rate Limiters Using Floating Buckets                                                                       |
| 826/8062     | Published   |               | 2/18/2011   |            | 13/030360          | US | Securing the virtualized environment while minimizing virtual host performance impact                             |
| 829/19364    | Granted     | 8510803       | 1/17/2012   | 8/13/2013  | 13/352054          | US | Dynamic Network Access Control Method and Apparatus                                                               |
| 84264682     | Application |               | 8/7/2015    |            | 14/821433          | US | GENERATING NEGATIVE CLASSIFIER DATA BASED ON POSITIVE CLASSIFIER DATA                                             |
| 825/9213     | Granted     | 8176527       | 12/2/2002   | 5/8/2012   | 10/308767          | US | Correlation Engine With Support For Time-Based Rules                                                              |
| 825/9233     | Granted     | 7607169       | 12/2/2002   | 10/20/2009 | 10/308418          | US | User Interface For Network Security Console                                                                       |
| 825/9313     | Granted     | 7424742       | 10/27/2004  | 9/9/2008   | 10/976075          | US | Dynamic Security Events And Event Channels In A Network Security System                                           |
| 83699846     | Allowed     |               | 10/31/2011  |            | 14/116128          | US | NETWORK ASSET INFORMATION MANAGEMENT                                                                              |
| 83787666     | Published   |               | 8/1/2012    |            | 14/233178          | US | ASSET MODEL IMPORT CONNECTOR                                                                                      |
| 83806246     | Application |               | 9/7/2012    |            | 14/239915          | US | VISUAL COMPONENT AND DRILL DOWN MAPPING                                                                           |
| 84141296     | Application |               | 7/31/2012   |            | 14/418910          | US | Pattern Consolidation To Identify Malicious Activity                                                              |
| 90032827     | Application |               | 9/4/2015    |            | 14/846555          | US | GENERATING ROW-BASED AND COLUMN-BASED CHUNKS                                                                      |
| 90068705     | To Be Filed |               | 4/16/2013   |            |                    | US | DISTRIBUTED EVENT CORRELATION SYSTEM                                                                              |
| 81998510     | Granted     | 8060680       | 9/16/2002   | 40862      | 10/245229          | US | Method of Allocating Memory                                                                                       |
| 82098404     | Granted     | 7725892       | 7/1/2003    | 40323      | 10/610657          | US | FIELD-REPLACEABLE UNIT REVISION COMPATIBILITY                                                                     |
| 82129493     | Granted     | 5859911       | 4/16/1997   | 36172      | 08/840795          | US | METHOD FOR THE SECURE REMOTE FLASHING OF THE BIOS OF A COMPUTER                                                   |
| 82130621     | Granted     | 6418469       | 9/30/1997   | 37446      | 08/941410          | US | MANAGING CONDITIONS IN A NETWORK                                                                                  |
| 82135298     | Granted     | 6085328       | 1/20/1998   | 36711      | 09/009788          | US | WAKE UP OF A SLEEPING COMPUTE R USING I/O SNOOPING AND IMPERFECT PACKET FILTERING                                 |
| 82136549     | Granted     | 6260068       | 6/10/1998   | 37082      | 09/095265          | US | METHOD AND APPARATUS FOR ADAPTIVELY MIGRATING RESOURCES BETWEEN THE PARTITIONS OF MULTI PROCESSOR COMPUTER SYSTEM |
| 82179692     | Granted     | 7437651       | 6/29/2004   | 39735      | 10/879262          | US | System And Method For Controlling Application Of An Error Correction Code (ECC) Algorithm In A Memory Subsystem   |
| 82191368     | Granted     | 7574593       | 12/3/2004   | 40036      | 11/004355          | US | Persistent Memory Manipulation Using EFI                                                                          |
| 82196111     | Granted     | 7921345       | 5/19/2005   | 40638      | 11/132569          | US | Automated Test System                                                                                             |
| 82196174     | Granted     | 7302547       | 9/30/2004   | 11/27/2007 | 10/955802          | US | Method And System For Supporting Virtual Mappings For Shared Firmware                                             |
| 82225643     | Granted     | 7930440       | 1/31/2007   | 4/19/2011  | 11/669912          | US | Determining Electrical Compatibility And/or Configuration Of Devices In A Pre-boot Environment                    |
| 82226390     | Granted     | 7793089       | 1/31/2007   | 9/7/2010   | 11/669839          | US | Configurable Backplane Connectivity For An Electrical Device                                                      |
| 82904422     | Published   |               | 2/10/2012   |            | 13/370551          | US | PROXY INFRASTRUCTURE TO ACCESS FIRMWARE-BASED FEATURES                                                            |

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| 83720613     | Granted     | 9026627       | 1/6/2014    | 5/5/2015   | 14/148376          | US | Method And System For Switching Between Remote Computing Sessions                                                                          |
| 83874547     | Published   |               | 10/28/2011  |            | 14/348202          | US | Management of A Computer                                                                                                                   |
| 84079556     | Published   |               | 5/31/2012   |            | 14/397316          | US | ESTABLISHING TRUST BETWEEN PROCESSOR AND SERVER                                                                                            |
| 84126500     | Published   |               | 7/17/2012   |            | 14/414448          | US | SYSTEM AND METHOD FOR OPERATING SYSTEM AGNOSTIC HARDWARE VALIDATION                                                                        |
| 84291340     | Application |               | 1/29/2013   |            | 14/763501          | US | ASSIGNING PROCESSORS TO MEMORY MAPPED CONFIGURATION                                                                                        |
| 90068662     | Application |               | 3/29/2013   |            | 14/781301          | US | UPDATE OF PROGRAMMABLE FOR COMPUTING NODES                                                                                                 |
| 82850147     | Published   |               | 5/11/2012   |            | 13/469625          | US | CONSTRUCTING A PROJECTION FOR STORING DATA                                                                                                 |
| 82850170     | Granted     | 8782364       | 12/13/2011  | 7/15/2014  | 13/324830          | US | DETERMINING AVAILABILITY OF DATA ELEMENTS IN A STORAGE SYSTEM                                                                              |
| 82865444     | Published   |               | 11/8/2011   |            | 13/291711          | US | QUERY ANALYSIS IN A DATABASE                                                                                                               |
| 82940503     | Granted     | 9143562       | 4/27/2012   | 9/22/2015  | 13/458885          | US | MANAGING TRANSFER OF DATA FROM A SOURCE TO A DESTINATION MACHINE CLUSTER                                                                   |
| 83781692     | Granted     | 9141654       | 4/3/2014    | 9/22/2015  | 14/244649          | US | EXECUTING USER-DEFINED FUNCTION ON A PLURALITY OF DATABASE TUPLES                                                                          |
| 83996293     | Application |               | 4/30/2012   |            | 14/375594          | US | OBJECT DEPENDENCY MANAGEMENT                                                                                                               |
| 84123151     | Application |               | 1/6/2015    |            | 14/590570          | US | DATA TRANSFER REQUESTS WITH DATA TRANSFER POLICIES                                                                                         |
| 82210904     | Granted     | 7587492       | 7/29/2005   | 9/8/2009   | 11/193079          | US | Dynamic Performance Management For Virtual Servers                                                                                         |
| 82256546     | Application |               | 9/14/2004   |            | 10/941038          | US | System, Method, And Computer Program Product For Brokering Data Processing Services                                                        |
| 82256855     | Granted     | 8473376       | 3/23/2005   | 6/25/2013  | 11/087536          | US | System, Method, And Computer Program Product For Byte-based Utility Computing Pricing                                                      |
| 84241568     | Application |               | 12/7/2012   |            | 14/440994          | US | NETWORK RESOURCE MANAGEMENT                                                                                                                |
| 82947625     | Granted     | 7822812       | 1/3/2007    | 10/26/2010 | 11/619497          | US | TECHNIQUES FOR SHARING CONTENT INFORMATION WITH MEMBERS OF A VIRTUAL USER GROUP IN A NETWORK ENVIRONMENT WITHOUT COMPROMISING USER PRIVACY |
| 82947642     | Granted     | 8862670       | 1/26/2007   | 10/14/2014 | 11/627890          | US | SYSTEMS AND METHODS FOR INTERACTIVELY ANALYZING COMMUNICATION CHAINS BASED ON MESSAGES                                                     |
| 82947645     | Granted     | 8224641       | 11/19/2008  | 7/17/2012  | 12/274182          | US | LANGUAGE IDENTIFICATION FOR DOCUMENTS CONTAINING MULTIPLE LANGUAGES                                                                        |
| 82948126     | Application |               | 3/15/2005   |            | 11/081210          | US | INTEGRATED DATA AND REAL-TIME METADATA CAPTURE SYSTEM AND METHOD                                                                           |
| 82948140     | Granted     | 7962948       | 4/6/2001    | 6/14/2011  | 09/828618          | US | VIDEO-ENABLED COMMUNITY BUILDING                                                                                                           |
| 82948312     | Granted     | 6269370       | 9/15/1998   | 7/31/2001  | 09/153519          | US | WEB SCAN PROCESS                                                                                                                           |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------|
| 82948581     | Granted     | 8161318       | 8/7/2006    | 4/17/2012  | 11/500809          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                                     |
| 82948598     | Granted     | 7870416       | 8/7/2006    | 1/11/2011  | 11/500864          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                                     |
| 82948601     | Granted     | 7657780       | 8/7/2006    | 2/2/2010   | 11/500805          | US | ENTERPRISE SERVICE AVAILABILITY THROUGH IDENTITY PRESERVATION                                                                     |
| 82948664     | Granted     | 8576342       | 1/30/2012   | 11/5/2013  | 13/361903          | US | SYSTEM AND METHOD FOR DETECTING SCENE CHANGES IN DIGITAL VIDEO STREAM                                                             |
| 82962710     | Published   |               | 4/26/2012   |            | 13/457112          | US | DOCUMENT-TYPE AND CAPTURE METHOD AGNOSTIC VERSIONING OF AN ARCHIVED DOCUMENT                                                      |
| 82118198     | Granted     | 7016494       | 3/26/2001   | 3/21/2006  | 09/818074          | US | MULTIPLE CRYPTOGRAPHIC KEY PRECOMPUTE AND STORE                                                                                   |
| 83100806     | Granted     | 8918893       | 10/29/2012  | 12/23/2014 | 13/662678          | US | Managing A Fault Condition By A Security Module                                                                                   |
| 84210513     | Application |               | 10/2/2012   |            | 14/432910          | US | SECURITY SHIELD ASSEMBLY                                                                                                          |
| 81955619     | Granted     | 5881280       | 7/25/1997   | 3/9/1999   | 08/900274          | US | METHOD AND SYSTEM FOR SELECTING INSTRUCTIONS FOR RE-EXECUTION FOR IN-LINE EXCEPTION RECOVERY IN A SPECULATIVE EXECUTION PROCESSOR |
| 81977162     | Granted     | 6782453       | 2/12/2002   | 8/24/2004  | 10/072925          | US | Storing Data In Memory                                                                                                            |
| 81979844     | Granted     | 6772372       | 3/6/2001    | 8/3/2004   | 09/800283          | US | System And Method For Monitoring Unaligned Memory Accesses                                                                        |
| 81981653     | Granted     | 7761449       | 8/9/2001    | 40379      | 09/927163          | US | Self-disentangling Data Storage Technique                                                                                         |
| 81996452     | Granted     | 6874014       | 5/29/2001   | 3/29/2005  | 09/865605          | US | Chip Multiprocessor With Multiple Operating Systems                                                                               |
| 81997328     | Granted     | 6856570       | 10/30/2003  | 38398      | 10/697677          | US | APPARATUS FOR WRITING DATA BITS TO A MEMORY ARRAY                                                                                 |
| 81998204     | Granted     | 7363347       | 11/7/2002   | 4/22/2008  | 10/289311          | US | Method And System For Reestablishing Connection Information On A Switch Connected To Plural Servers In A Computer Network         |
| 82011686     | Granted     | 5720025       | 1/18/1996   | 2/17/1998  | 08/588140          | US | Frequently-Redundant Array Of Independent Disks                                                                                   |
| 82013993     | Granted     | 5650757       | 3/27/1996   | 7/22/1997  | 08/624015          | US | Impedance Stepping For Increasing The Operating Speed Of Computer Backplane Busses                                                |
| 82037660     | Granted     | 6374331       | 12/30/1998  | 4/16/2002  | 09/223469          | US | Distributed Directory Cache Coherence Multi-Processor Computer Architecture                                                       |
| 82039472     | Granted     | 6205519       | 5/27/1998   | 36970      | 09/085644          | US | Cache Management For A Multi-Threaded Processor                                                                                   |
| 82041842     | Granted     | 6269410       | 2/12/1999   | 37103      | 09/249399          | US | Method And Apparatus For Using System Traces To Characterize Workloads In A Data Storage System                                   |
| 82043150     | Granted     | 6874065       | 2/26/1999   | 3/29/2005  | 09/258549          | US | CACHE-FLUSHING ENGINE FOR DISTRIBUTED SHARED MEMORY MULTI-PROCESSOR COMPUTER SYSTEMS                                              |
| 82043153     | Granted     | 6360231       | 2/26/1999   | 3/19/2002  | 09/258608          | US | Transactional Memory For Distributed Shared Memory Multi-Processor Computer Systems                                               |
| 82045028     | Granted     | 6769017       | 3/13/2000   | 38195      | 09/524175          | US | Apparatus For And Method Of Memory-affinity Process Scheduling In Cc-numa Systems                                                 |

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| 82091852     | Granted | 6895460       | 7/19/2002   | 38489      | 10/198839          | US | Synchronization Of Asynchronous Emulated Interrupts                                                                                  |
| 82092221     | Granted | 6862179       | 11/26/2002  | 38412      | 10/303761          | US | PARTITION FOR VARYING THE SUPPLY OF COOLING FLUID                                                                                    |
| 82095032     | Granted | 7082778       | 9/4/2003    | 38930      | 10/656588          | US | Self-contained Spray Cooling Module                                                                                                  |
| 82099340     | Granted | 7310737       | 6/30/2003   | 12/18/2007 | 10/608151          | US | Cooling System For Computer Systems                                                                                                  |
| 82099343     | Granted | 7269751       | 7/29/2003   | 39336      | 10/628291          | US | Supplying Power To At Least One Electrical Device Based On                                                                           |
| 82117817     | Granted | 6912624       | 2/2/2004    | 38531      | 10/769824          | US | An Efficient Operating Point Of A Power Supply                                                                                       |
| 82134677     | Granted | 5950228       | 2/3/1997    | 9/7/1999   | 08/794172          | US | METHOD AND SYSTEM FOR EXCLUSIVE TWO-LEVEL CACHING IN A CHIP-MULTIPROCESSOR                                                           |
| 82135055     | Granted | 6061686       | 6/26/1997   | 5/9/2000   | 08/882883          | US | VARIABLE-GRAINED MEMORY SHARING FOR CLUSTERS OF SYMMETRIC MULTI-PROCESSORS USING PRIVATE AND SHARED STATE TABLES                     |
| 82136234     | Granted | 6163840       | 11/26/1997  | 12/19/2000 | 08/980168          | US | UPDATINGS AND METHOD FOR UPDATING A COPY OF A REMOTE DOCUMENT STORED IN A LOCAL COMPUTER SYSTEM                                      |
| 82176503     | Granted | 7031802       | 8/13/2003   | 4/18/2006  | 10/639428          | US | APPARATUS FOR SAMPLING MULTIPLE POTENTIALLY CONCURRENT INSTRUCTIONS IN A PROCESSOR PIPELINE                                          |
| 82180187     | Granted | 7925738       | 12/18/2003  | 40645      | 10/740276          | US | Semi-Autonomous Operation Of A Robotic Device                                                                                        |
| 82184372     | Granted | 7284088       | 10/23/2003  | 10/16/2007 | 10/693573          | US | Analytical Cache Performance Model For A Media Server                                                                                |
| 82185374     | Granted | 7676662       | 7/31/2004   | 40246      | 10/903613          | US | Methods Of Reading And Writing Data                                                                                                  |
| 82185494     | Granted | 7203822       | 7/31/2004   | 4/10/2007  | 10/909802          | US | Virtualization Of A Non-privileged Instruction That Behaves Differently When Executed By Privileged Code Than By Non-privileged Code |
| 82189802     | Granted | 8627068       | 4/29/2005   | 1/7/2014   | 11/118158          | US | Unprivileged Context Management                                                                                                      |
| 82190930     | Granted | 7725926       | 8/23/2004   | 5/25/2010  | 10/924295          | US | Selecting Access Authorities                                                                                                         |
| 82196798     | Granted | 8392900       | 3/17/2005   | 41338      | 11/082321          | US | Authentication                                                                                                                       |
| 82197356     | Granted | 6848063       | 11/20/2001  | 38377      | 09/989357          | US | Methods And Systems For Barrier Reduction In Parallel Processing Systems                                                             |
| 82197731     | Granted | 8219890       | 10/6/2008   | 41100      | 12/246355          | US | System And Method For Scrubbing Errors In Very Large Memories                                                                        |
| 82197797     | Granted | 7725655       | 2/16/2006   | 40323      | 11/357815          | US | DENOISING AND ERROR CORRECTION FOR FINITE INPUT, GENERAL OUTPUT CHANNEL                                                              |
| 82198172     | Granted | 8726129       | 7/23/2004   | 41772      | 10/898139          | US | METHOD OF OPERATING DISTRIBUTED STORAGE SYSTEM IN WHICH DATA IS READ FROM REPLICATED CACHES AND STORED AS ERASURE-CODED DATA         |
| 82198172     | Granted | 8726129       | 7/23/2004   | 41772      | 10/898139          | US | Methods Of Writing And Recovering Erasure Coded Data                                                                                 |

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| 82202105     | Granted   | 8281313       | 9/29/2005   | 10/2/2012  | 11/241720          | US | SCHEDULING<br>COMPUTER<br>PROCESSING JOBS<br>THAT HAVE STAGES<br>AND PRECEDENCE<br>CONSTRAINTS AMONG<br>THE STAGES                                         |
| 82204661     | Granted   | 8335760       | 2/7/2005    | 12/18/2012 | 11/053703          | US | Grid Computing System To Manage Utility Service Content                                                                                                    |
| 82209281     | Granted   | 7975271       | 3/30/2005   | 7/5/2011   | 11/093827          | US | System And Method For Dynamically Determining A Portion<br>Of A Resource For Which A Thread Is To Obtain A Lock                                            |
| 82211345     | Granted   | 8793587       | 6/29/2005   | 7/29/2014  | 11/171586          | US | Interactive Display Of Data Center Assets                                                                                                                  |
| 82214837     | Granted   | 8185893       | 10/27/2006  | 5/22/2012  | 11/588635          | US | Starting Up At Least One Virtual Machine In A Physical<br>Machine By A Load Balancer                                                                       |
| 82214840     | Granted   | 8732699       | 10/27/2006  | 5/20/2014  | 11/588607          | US | Migrating Virtual Machines Between Physical Machines In A<br>Defined Group                                                                                 |
| 82215467     | Granted   | 7720955       | 10/10/2006  | 5/18/2010  | 11/545754          | US | DETERMINING PERFORMANCE OF AN APPLICATION BASED<br>ON TRANSACTIONS                                                                                         |
| 82218962     | Granted   | 8255910       | 7/18/2006   | 8/28/2012  | 11/488399          | US | Fair Weighted Proportional-share Virtual Time Scheduler                                                                                                    |
| 82219022     | Granted   | 8782671       | 7/26/2006   | 7/15/2014  | 11/493179          | US | Systems And Methods For Flexibly Controlling Resource<br>Usage By A Driver Domain On Behalf Of A Virtual Machine                                           |
| 82219769     | Granted   | 8732307       | 7/25/2006   | 5/20/2014  | 11/492354          | US | Predictive Control For Resource Entitlement                                                                                                                |
| 82219772     | Granted   | 7676578       | 7/25/2006   | 3/9/2010   | 11/492307          | US | RESOURCE ENTITLEMENT CONTROL SYSTEM CONTROLLING<br>RESOURCE ENTITLEMENT BASED ON AUTOMATIC<br>DETERMINATION OF A TARGET UTILIZATION AND<br>CONTROLLER GAIN |
| 82222142     | Granted   | 7426616       | 8/22/2006   | 9/16/2008  | 11/508102          | US | Method For Determining A Recovery Schedule                                                                                                                 |
| 82225391     | Granted   | 8909872       | 10/31/2006  | 41982      | 11/555215          | US | Computer System With Coherent Interconnection                                                                                                              |
| 82225394     | Granted   | 7555419       | 7/23/2006   | 6/30/2009  | 11/492169          | US | Simulation Of System Execution Of Instructions                                                                                                             |
| 82228949     | Granted   | 8255686       | 7/27/2007   | 41149      | 11/829673          | US | Securing Sensed Data Communication Over A Network                                                                                                          |
| 82229195     | Granted   | 8105882       | 9/9/2010    | 40939      | 12/878215          | US | Method Of Forming A Packaged Chip Multiprocessor<br>(amended)                                                                                              |
| 82230137     | Granted   | 7757023       | 8/1/2007    | 40372      | 11/888348          | US | Storage-centric Manageability In A System                                                                                                                  |
| 82231574     | Granted   | 7912690       | 4/25/2007   | 40624      | 11/740269          | US | DYNAMIC SAMPLING OF FUNCTIONAL SIMULATION TO<br>DETERMINE WHETHER TO PERFORM BOTH FUNCTIONAL AND<br>TIMING SIMULATION                                      |
| 82232318     | Granted   | 8392708       | 9/29/2008   | 41338      | 12/240742          | US | Auditing Data Integrity                                                                                                                                    |
| 82238192     | Granted   | 8491702       | 12/21/2007  | 7/23/2013  | 12/744902          | US | Moisture Content Control System                                                                                                                            |
| 82238690     | Granted   | 8131515       | 10/20/2008  | 40974      | 12/254664          | US | Data Center Synthesis                                                                                                                                      |
| 82239560     | Published |               | 11/8/2007   |            | 12/680903          | US | URL AND ANCHOR TEXT ANALYSIS FOR FOCUSED CRAWLING                                                                                                          |

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| 82239623     | Granted     | 7925923       | 10/29/2008  | 4/12/2011  | 12/260787          | US | Migrating A Virtual Machine In Response To Failure Of A Instruction To Execute                 |
| 82240061     | Application |               | 10/15/2008  |            | 12/252011          | US | Simulation Of Execution Of Nodes Having Processors                                             |
| 82240190     | Granted     | 7941698       | 10/15/2008  | 40673      | 12/252144          | US | SELECTIVE AVAILABILITY IN PROCESSOR SYSTEMS                                                    |
| 82244621     | Granted     | 8260603       | 9/30/2008   | 9/4/2012   | 12/241948          | US | Scaling A Prediction Model Of Resource Usage Of An Application In A Virtual Environment        |
| 82246928     | Granted     | 8639643       | 10/31/2008  | 41667      | 13/119936          | US | Classification Of A Document According To A Weighted Search Tree Created By Genetic Algorithms |
| 82248305     | Published   |               | 10/31/2008  |            | 12/290617          | US | Forensic Snapshot                                                                              |
| 82248800     | Granted     | 8255709       | 2/6/2009    | 41149      | 12/366939          | US | Power Budgeting For A Group Of Computer Systems                                                |
| 82249055     | Granted     | 8321183       | 1/13/2009   | 11/27/2012 | 12/353104          | US | Multi-variable Control-based Optimization To Achieve Target Goal                               |
| 82249925     | Granted     | 8882572       | 6/8/2009    | 11/11/2014 | 12/480429          | US | Vent Tile With An Integrated Thermal Imaging Sensor And Controller                             |
| 82250612     | Granted     | 8108620       | 3/10/2009   | 1/31/2012  | 12/400991          | US | Cooperative Caching Technique                                                                  |
| 82258544     | Granted     | 8630967       | 12/7/2009   | 41653      | 12/632682          | US | Determining Operational Settings For Fluid Moving Devices                                      |
| 82259600     | Granted     | 8402461       | 11/15/2009  | 3/19/2013  | 12/618746          | US | Switching Between Direct Mode And Indirect Mode For Virtual Machine I/O Requests               |
| 82260353     | Granted     | 8248793       | 3/29/2010   | 8/21/2012  | 12/748835          | US | Electronic Component Having A Movable Louver                                                   |
| 82262597     | Granted     | 8499116       | 6/11/2010   | 7/30/2013  | 12/813772          | US | Managing Wear On Independent Storage Devices                                                   |
| 82262909     | Granted     | 8498841       | 4/21/2010   | 7/30/2013  | 12/764286          | US | MAPPED THERMAL ELECTRIC COOLING                                                                |
| 82263161     | Granted     | 9141359       | 12/13/2010  | 9/22/2015  | 12/966867          | US | Procedural Concurrency Graph Generator                                                         |
| 82263164     | Granted     | 8813054       | 12/13/2010  | 8/19/2014  | 12/966824          | US | Sequential-Code Optimization of Parallel Code Based on Identifying Siloed Program References   |
| 82264724     | Granted     | 8331131       | 1/31/2011   | 41254      | 13/018040          | US | Changing a Memristor State                                                                     |
| 82264784     | Published   |               | 6/24/2010   |            | 12/823041          | US | Compaction And De-allocation Of Partial Objects Through Scheduling A Transaction               |
| 82275773     | Granted     | 8516271       | 3/11/2011   | 8/20/2013  | 13/046381          | US | Securing Non-Volatile Memory Regions                                                           |
| 82576594     | Published   |               | 7/1/2008    |            | 12/999260          | US | Remote Computing Services                                                                      |
| 82663123     | Published   |               | 7/29/2011   |            | 13/194798          | US | Statistically-Based Anomaly Detection in Utility Clouds                                        |
| 82670302     | Granted     | 8812427       | 4/27/2011   | 8/19/2014  | 13/095518          | US | SYSTEM AND METHOD FOR DISAGGREGATING POWER LOAD                                                |
| 82737744     | Granted     | 8832012       | 10/26/2011  | 9/9/2014   | 13/282388          | US | SYSTEM AND METHOD FOR TREE DISCOVERY                                                           |
| 82775039     | Granted     | 8589360       | 12/12/2011  | 11/19/2013 | 13/323577          | US | Verifying Consistency Levels                                                                   |
| 82828129     | Granted     | 8938575       | 4/3/2012    | 1/20/2015  | 13/438438          | US | Minimized Half-Select Current in Multi-State Memories                                          |
| 82832520     | Published   |               | 11/4/2011   |            | 13/289930          | US | PROVIDING ELASTIC INSIGHT TO INFORMATION TECHNOLOGY PERFORMANCE DATA                           |
| 82846984     | Published   |               | 2/2/2012    |            | 13/364723          | US | Ownership Acquire Policy Selection                                                             |
| 82850190     | Granted     | 8832050       | 3/9/2012    | 9/9/2014   | 13/416603          | US | VALIDATION OF DISTRIBUTED BALANCED TREES                                                       |

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| 82852314     | Granted     | 866/7015      | 11/25/2009  | 3/4/2014   | 13/258480          | US | Data Extraction Method, Computer Program Product And System                                        |
| 82853264     | Granted     | 8713280       | 10/30/2009  | 4/29/2014  | 13/259210          | US | HARD DISK DRIVES HAVING DIFFERENT ROTATIONAL SPEEDS                                                |
| 82911243     | Granted     | 9063/750      | 2/1/2012    | 6/23/2015  | 13/363722          | US | MAPPING HIGH-PERFORMANCE COMPUTING APPLICATIONS TO PLATFORMS                                       |
| 82916261     | Published   |               | 4/30/2012   |            | 13/459994          | US | Storing Cache Metadata Separately From Integrated Circuit Containing Cache Controller              |
| 82916304     | Published   |               | 4/27/2012   |            | 13/458477          | US | DATA CACHING USING LOCAL AND REMOTE MEMORY                                                         |
| 82929726     | Published   |               | 1/27/2011   |            | 13/387714          | US | Memory Access Methods And Apparatus                                                                |
| 82963483     | Published   |               | 4/27/2012   |            | 13/458462          | US | Estimating Occupancy Of Buildings                                                                  |
| 82963500     | Published   |               | 4/30/2012   |            | 13/460808          | US | Dynamic Partitioning of a Data Structure                                                           |
| 82963566     | Granted     | 8918510       | 4/27/2012   | 12/23/2014 | 13/458790          | US | Evaluation of Cloud Computing Services                                                             |
| 82963623     | Granted     | 9141430       | 4/30/2012   | 9/22/2015  | 13/460687          | US | Scheduling MapReduce Job Sets                                                                      |
| 82976012     | Granted     | 8745265       | 4/10/2012   | 6/3/2014   | 13/443356          | US | Interconnection Fabric Connection                                                                  |
| 83013427     | Allowed     |               | 8/28/2012   |            | 13/596331          | US | ACCESSING REMOTE MEMORY ON A MEMORY BLADE                                                          |
| 83038797     | Published   |               | 7/30/2012   |            | 13/561213          | US | PROVISIONING RESOURCES IN A FEDERATED CLOUD ENVIRONMENT                                            |
| 83051486     | Granted     | 9015721       | 7/30/2012   | 4/21/2015  | 13/562248          | US | MANAGING ARRAY COMPUTATIONS DURING PROGRAMMATIC RUN-TIME IN A DISTRIBUTED COMPUTING ENVIRONMENT    |
| 83099558     | Published   |               | 11/9/2012   |            | 13/673702          | US | Load-Balanced Sparse Array Processing                                                              |
| 83134915     | Published   |               | 6/30/2010   |            | 13/805212          | US | Determining Similarity Between Elements Of An Electronic Document                                  |
| 83156558     | Published   |               | 3/20/2013   |            | 13/847717          | US | ALLOCATING AND SHARING A DATA OBJECT AMONG PROGRAM INSTANCES                                       |
| 83209754     | Published   |               | 7/2/2013    |            | 13/933215          | US | PRODUCING A BENCHMARK DESCRIBING CHARACTERISTICS OF MAP AND REDUCE TASKS                           |
| 83700281     | Published   |               | 5/8/2011    |            | 14/110484          | US | INDICATING DOCUMENTS IN A THREAD REACHING A THRESHOLD                                              |
| 83769083     | Published   |               | 7/27/2011   |            | 14/233230          | US | Method and System for Reducing Write-Buffer Capacities within Memristor-Based Data-Storage Devices |
| 83853777     | Published   |               | 10/15/2011  |            | 14/349156          | US | QUANTIFYING POWER USAGE FOR A SERVICE                                                              |
| 83862791     | Published   |               | 11/11/2011  |            | 14/350376          | US | MANAGING AIRFLOW PROVISIONING                                                                      |
| 83952984     | Application |               | 6/30/2014   |            | 14/318871          | US | DATASET AUGMENTATION BASED ON OCCCLUSION AND INPAINTING                                            |
| 84115703     | Published   |               | 6/8/2012    |            | 14/405899          | US | AUGMENTING MEMORY CAPACITY FOR KEY VALUE CACHE                                                     |
| 84115726     | Application |               | 6/8/2012    |            | 14/405904          | US | ACCESSING MEMORY                                                                                   |
| 84137077     | Published   |               | 7/31/2012   |            | 14/417227          | US | Determining Installation Locations for Meters                                                      |

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| 84223005     | Application |               | 4/22/2015   |            | 14/437677          | US | MANAGING AIRFLOW DISTRIBUTION THROUGH ADAPTIVE VENT TILES                                              |
| 84304390     | Application |               | 1/15/2013   |            | 14/759692          | US | Vertically-Tiered Client-Server Architecture                                                           |
| 83137769     | Application |               | 1/31/2013   |            | 13/755349          | US | ASSET RATING USING ATTRIBUTE CORRELATION                                                               |
| 83011160     | Granted     | 8855118       | 9/25/2012   | 10/7/2014  | 13/626571          | US | SOURCE DISCOVERY FOR NON-FLOODING MULTICAST USING OPENFLOW                                             |
| 82121690     | Granted     | 7015682       | 1/30/2003   | 3/21/2006  | 10/354745          | US | CONTROL OF A POWER FACTOR CORRECTED SWITCHING POWER SUPPLY                                             |
| 82129181     | Granted     | 5801522       | 9/26/1996   | 9/1/1998   | 08/720211          | US | POWER LIMIT CIRCUIT FOR COMPUTER SYSTEM                                                                |
| 82169516     | Granted     | 7447043       | 12/22/2003  | 11/4/2008  | 10/743611          | US | Power Cabling Assembly                                                                                 |
| 82174817     | Granted     | 7646109       | 7/12/2005   | 1/12/2010  | 11/179920          | US | System For Distributing AC Power Within An Equipment Rack                                              |
| 82178816     | Granted     | 7719809       | 9/12/2006   | 5/18/2010  | 11/519635          | US | Method And Apparatus For Distributing Electrical Power                                                 |
| 82179626     | Granted     | 7280365       | 2/18/2005   | 10/9/2007  | 11/061156          | US | Multi-processor Module With Redundant Power                                                            |
| 82179629     | Granted     | 7791889       | 2/16/2005   | 9/7/2010   | 11/059189          | US | Redundant Power Beneath Circuit Board                                                                  |
| 82179812     | Granted     | 7502699       | 7/29/2005   | 3/10/2009  | 11/193689          | US | System And Method For Monitoring Power In A Front End Rectifier Power System                           |
| 82182686     | Granted     | 7360104       | 1/31/2005   | 4/15/2008  | 11/047304          | US | REDUNDANT VOLTAGE DISTRIBUTION SYSTEM AND METHOD FOR A MEMORY MODULE HAVING MULTIPLE EXTERNAL VOLTAGES |
| 82184933     | Granted     | 7512825       | 9/27/2004   | 3/31/2009  | 10/951179          | US | Responding To DC Power Degradation                                                                     |
| 82217522     | Granted     | 7793115       | 9/13/2006   | 9/7/2010   | 11/531534          | US | Method And Apparatus For Operating A Power Feed In A Computer System                                   |
| 82220954     | Granted     | 7649404       | 10/13/2006  | 1/19/2010  | 11/580756          | US | Independent Thresholds For Power Supply Control Circuitry                                              |
| 82238123     | Granted     | 8024586       | 5/21/2008   | 9/20/2011  | 12/124950          | US | Method And System Of Determining Computing Module's Power Requirements                                 |
| 82241000     | Granted     | 8564266       | 4/4/2008    | 10/22/2013 | 12/994101          | US | DC-TO-DC CONVERTER WITH INDEPENDENT COMPENSATION LOGIC                                                 |
| 82262099     | Published   |               | 3/16/2010   |            | 12/725051          | US | FAN CONTROL SYSTEM AND METHOD                                                                          |
| 82265033     | Published   |               | 11/1/2010   |            | 12/916800          | US | ADAPTIVE RATING FOR BACKUP POWER SUPPLY                                                                |
| 82675523     | Granted     | 8933680       | 7/8/2011    | 1/13/2015  | 13/178829          | US | OUTPUT INDUCTOR VOLTAGE REGULATION                                                                     |
| 82853058     | Published   |               | 4/27/2009   |            | 13/259542          | US | SWITCHING POWER SUPPLY FOR A LOAD IN STANDBY MODE                                                      |
| 82901711     | Published   |               | 1/29/2010   |            | 13/386375          | US | Managing Electric Energy Distribution To Multiple Loads Using Selective Capping                        |
| 82083230     | Granted     | 6659168       | 7/9/2002    | 37964      | 10/192124          | US | Heatsink With Multiple Fin Types                                                                       |
| 82085792     | Granted     | 6879487       | 9/30/2003   | 4/12/2005  | 10/677151          | US | Fan-Securing Device For Use With A Heat Transfer Device                                                |
| 82120439     | Granted     | 6985358       | 11/19/2003  | 38727      | 10/716763          | US | COMPUTER CHASSIS WITH FAN TRAY ASSEMBLY                                                                |
| 82132181     | Granted     | 6373696       | 6/15/1998   | 4/16/2002  | 09/094885          | US | HARD DRIVE COOLING USING FINNED HEAT SINK AND THERMALLY CONDUCTIVE INTERFACE PAD                       |

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| 82179566     | Granted     | 7336490       | 11/24/2004  | 2/26/2008  | 10/996721          | US | MULTI-CHIP MODULE WITH POWER SYSTEM                                                                                        |
| 82179569     | Granted     | 7499281       | 1/2/2008    | 3/3/2009   | 11/968520          | US | MULTI-CHIP MODULE WITH POWER SYSTEM                                                                                        |
| 82181438     | Granted     | 7327570       | 12/22/2004  | 39483      | 11/022728          | US | Fluid Cooled Integrated Circuit Module                                                                                     |
| 82182434     | Granted     | 7558063       | 4/26/2007   | 7/7/2009   | 11/740624          | US | SERVER WITH A FLEXIBLE COOLING SCHEME                                                                                      |
| 82185245     | Granted     | 7426110       | 10/26/2005  | 9/16/2008  | 11/260105          | US | Centrifugal Fan Clutch For An Electronics Cooling Fan                                                                      |
| 82186433     | Granted     | 6981915       | 3/15/2004   | 1/3/2006   | 10/799730          | US | Airflow Volume Control System                                                                                              |
| 82187555     | Granted     | 7907403       | 10/25/2005  | 3/15/2011  | 11/258626          | US | Active Heat Sink With Multiple Fans                                                                                        |
| 82187618     | Granted     | 8647077       | 2/20/2004   | 2/11/2014  | 10/783162          | US | Cooling Fan For Electronic Device                                                                                          |
| 82197422     | Granted     | 8051671       | 10/3/2005   | 11/8/2011  | 11/242436          | US | System And Method For Cooling Computers                                                                                    |
| 82204037     | Granted     | 7218515       | 5/19/2005   | 5/15/2007  | 11/132570          | US | Cooling Fan With External Circuit Board                                                                                    |
| 82207283     | Granted     | 7447019       | 10/31/2005  | 11/4/2008  | 11/263458          | US | Computer Having An Axial Duct Fan                                                                                          |
| 82207286     | Granted     | 7558061       | 8/4/2006    | 7/7/2009   | 11/462502          | US | Cooling Fan Module                                                                                                         |
| 82216148     | Granted     | 7447026       | 8/31/2006   | 11/4/2008  | 11/468880          | US | System For Hot Swapping Heat Exchangers                                                                                    |
| 82224395     | Granted     | 7870872       | 3/30/2007   | 1/18/2011  | 11/731539          | US | Controlling Cooling Fluid Flow In A Cooling System With A Variable Inline Nozzle                                           |
| 82227761     | Granted     | 7511959       | 4/25/2007   | 3/31/2009  | 11/789651          | US | Scalable Computing Apparatus                                                                                               |
| 82231823     | Granted     | 7688578       | 7/19/2007   | 40267      | 11/880342          | US | A Modular High-density Computer System                                                                                     |
| 82235321     | Granted     | 8270155       | 2/15/2008   | 9/18/2012  | 12/866858          | US | Coolant Pulsing For Computer System                                                                                        |
| 82237937     | Granted     | 7800902       | 6/4/2008    | 40442      | 12/133161          | US | Air Backflow Prevention In An Enclosure                                                                                    |
| 82249052     | Granted     | 7821785       | 4/20/2009   | 40477      | 12/426863          | US | HEATSINKS AND A SPRING IN A BAFFLE SLOT BETWEEN ADJACENT COMPONENTS                                                        |
| 82659081     | Granted     | 8213176       | 3/14/2011   | 7/3/2012   | 13/047499          | US | Systems And Methods For Providing Airflow                                                                                  |
| 82828149     | Published   |               | 11/30/2011  |            | 13/307132          | US | DETERMINE INSTALLATION OF COMPONENTS BASED ON PERFORMANCE CHARACTERISTICS                                                  |
| 82852334     | Granted     | 8767403       | 10/30/2009  | 7/1/2014   | 13/260207          | US | FRAME HAVING FRAME BLADES THAT PARTICIPATE IN COOLING MEMORY MODULES                                                       |
| 82931993     | Granted     | 9019704       | 8/27/2009   | 4/28/2015  | 13/386138          | US | HEAT STORAGE BY PHASE-CHANGE MATERIAL                                                                                      |
| 83058499     | Granted     | D689182       | 8/22/2012   | 41520      | 29/430233          | US | FAN                                                                                                                        |
| 90053637     | To Be Filed |               | 4/3/2013    |            |                    | US | ZONEABLE POWER REGULATION                                                                                                  |
| 82257296     | Granted     | 8924497       | 11/16/2007  | 12/30/2014 | 11/941737          | US | MANAGING DELIVERY OF ELECTRONIC MESSAGES                                                                                   |
| 82027172     | Granted     | 5999359       | 5/9/1997    | 12/7/1999  | 08/853243          | US | Head Positioning System With Photosensor                                                                                   |
| 82067315     | Granted     | 6198588       | 9/23/1997   | 3/6/2001   | 08/936843          | US | TAPE PLAYBACK UNIT AND METHOD HAVING ADAPTIVE FILTER                                                                       |
| 81966353     | Granted     | 6857086       | 4/21/2003   | 2/15/2005  | 10/419558          | US | Hierarchy Of Fault Isolation Timers                                                                                        |
| 81967106     | Granted     | 6718447       | 6/28/2001   | 38083      | 09/895474          | US | Method And System For Providing Logically Consistent Logical Unit Backup Snapshots Within One Or More Data Storage Devices |
| 81968600     | Granted     | 6725317       | 4/29/2000   | 38097      | 09/562590          | US | SYSTEM AND METHOD FOR MANAGING A COMPUTER SYSTEM HAVING A PLURALITY OF PARTITIONS                                          |

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| 81971219     | Granted | 7412923       | 9/3/2003    | 39679      | 10/654066          | US | A Stencil Device For Accurately Applying Solder Paste To A Printed Circuit Board                                                         |
| 81972032     | Granted | 6651124       | 4/28/2000   | 37943      | 09/560910          | US | METHOD AND APPARATUS FOR PREVENTING DEADLOCK IN A DISTRIBUTED SHARED MEMORY SYSTEM                                                       |
| 81972221     | Granted | 6625673       | 5/1/2000    | 37887      | 09/562474          | US | Method For Assigning Addresses To Input/Output Devices                                                                                   |
| 81973781     | Granted | 6657358       | 6/26/2001   | 12/2/2003  | 09/892251          | US | Power Supply Including Pyroelectric Capacitor                                                                                            |
| 81974159     | Granted | 6678799       | 10/18/2001  | 1/13/2004  | 10/002993          | US | Aggregation Of Cache-updates In A Multi-processor, Shared-memory System                                                                  |
| 81976031     | Granted | 6684313       | 8/15/2001   | 1/27/2004  | 09/931081          | US | Managing Storage Contention In Automated Storage Systems                                                                                 |
| 81976343     | Granted | 6684381       | 9/29/2000   | 38013      | 09/675725          | US | Hardware Description Language-Embedded Regular Expression Support For Module Iteration And Interconnection                               |
| 81977594     | Granted | 7032086       | 2/28/2003   | 38825      | 10/375177          | US | SYSTEM AND METHOD FOR ADJUSTING STORAGE DEVICE LAYOUT WITH AT LEAST ONE STATUS FOR THE ADJUSTING                                         |
| 81978836     | Granted | 6621654       | 2/22/2001   | 9/16/2003  | 09/791107          | US | Apparatus And Method For Retaining Different Sizes Of Data Cartridges In A Storage Magazine                                              |
| 81982520     | Granted | 7236939       | 3/31/2001   | 39259      | 09/823581          | US | A PEER-TO-PEER INTER-ENTERPRISE COLLABORATIVE PROCESS MANAGEMENT METHOD AND SYSTEM                                                       |
| 81986705     | Granted | 6672381       | 4/30/2001   | 37992      | 09/843933          | US | Multi-Load Thermal Regulating System With Multiple Serial Evaporators                                                                    |
| 81995942     | Granted | 6681308       | 11/16/2001  | 38006      | 09/987866          | US | Method For Automatically Converting Block Size And Formatting Backend Fiber Channel Discs In An Auto Inclusive Storage Array Environment |
| 81996071     | Granted | 8032828       | 3/4/2002    | 40820      | 10/091237          | US | Method And System Of Document Transformation Between A Source Extensible Markup Language (XML) Schema And A Target XML Schema            |
| 81996629     | Granted | 6990568       | 3/30/2001   | 38741      | 09/823403          | US | Retiring Early-Completion Instructions To Improve Computer Operation Throughput                                                          |
| 81998627     | Granted | 7200665       | 10/17/2001  | 39175      | 09/981276          | US | Allowing Requests Of A Session To Be Serviced By Different Servers In A Multi-server Data Service System                                 |
| 82000691     | Granted | 6931489       | 8/12/2002   | 38580      | 10/217068          | US | Apparatus And Methods For Sharing Cache Among Processors                                                                                 |
| 82001255     | Granted | 7287277       | 12/21/2001  | 39378      | 10/023811          | US | METHOD AND APPARATUS FOR CONTROLLING EXECUTION OF A COMPUTER OPERATION                                                                   |
| 82001567     | Granted | 6705833       | 11/15/2001  | 38062      | 10/001003          | US | Airflow Flapper Valve                                                                                                                    |
| 82003934     | Granted | 6664813       | 3/19/2002   | 37971      | 10/100781          | US | Pseudo-NMOS Logic Having A Feedback Controller                                                                                           |
| 82004000     | Granted | 6687147       | 7/23/2002   | 38020      | 10/202174          | US | CUBIC MEMORY ARRAY WITH DIAGONAL SELECT LINES                                                                                            |
| 82004126     | Granted | 6674654       | 3/27/2002   | 37992      | 10/108940          | US | DC-DC Voltage Converter                                                                                                                  |
| 82005746     | Granted | 6661691       | 4/2/2002    | 37964      | 10/115763          | US | Interconnection Structure And Methods                                                                                                    |

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| 82007369     | Granted | 7360207       | 12/13/2001  | 39553      | 10/016949          | US | Method And System To Analyze Inlined Functions                                                                             |
| 82007804     | Granted | 6580422       | 4/27/1995   | 37789      | 08/430943          | US | Remote Computer Display Using Graphics Primitives Sent Over A Wireless Link                                                |
| 82014116     | Granted | 5831990       | 6/19/1996   | 11/3/1998  | 08/667037          | US | Test-Mode Control For Dynamic Logic Gates                                                                                  |
| 82014923     | Granted | 5801895       | 5/28/1996   | 9/1/1998   | 08/653898          | US | DISK DRIVE SERVO DEMODULATION SYSTEM WHICH SUPPRESSES NOISE ON THE POSITION ERROR SIGNAL                                   |
| 82014926     | Granted | 5856989       | 8/13/1996   | 1/5/1999   | 08/696220          | US | Method And Apparatus For Parity Block Generation                                                                           |
| 82016045     | Granted | 5778232       | 7/3/1996    | 7/7/1998   | 08/675174          | US | Automatic Compiler Restructuring Of COBOL Programs Into Proc Per Paragraph Model                                           |
| 82016798     | Granted | 5752037       | 4/26/1996   | 5/12/1998  | 08/639134          | US | Method Of Prefetching Data For References With Multiple Stride Directions                                                  |
| 82017236     | Granted | 5878934       | 3/21/1997   | 3/9/1999   | 08/822316          | US | Low-Profile Tape Drive With An External-Rotor Motor Directly Driving A Cartridge Capstan                                   |
| 82017671     | Granted | 5838978       | 10/9/1996   | 11/17/1998 | 08/731098          | US | System And Method Of Using Annotations To Optimize Dynamically Translated Code In The Presence Of Signals                  |
| 82017794     | Granted | 5920716       | 11/26/1996  | 7/6/1999   | 08/756423          | US | Compiling A Predicated Code With Direct Analysis Of The Predicated Code                                                    |
| 82018736     | Granted | 5903732       | 7/3/1996    | 5/11/1999  | 08/675132          | US | Trusted Gateway Agent For Web Server Programs                                                                              |
| 82022663     | Granted | 6634021       | 4/16/2001   | 10/14/2003 | 09/836667          | US | User Controlled Relaxation Of Optimization Constraints Related To Volatile Memory References                               |
| 82024913     | Granted | 6075386       | 10/22/1997  | 6/13/2000  | 08/955729          | US | Dynamic Logic Gate With Relaxed Timing Requirements And Output State Holding                                               |
| 82025285     | Granted | 6151297       | 7/8/1997    | 11/21/2000 | 08/889317          | US | Method And System For Link Level Server/Switch Trunking                                                                    |
| 82030784     | Granted | 6618354       | 3/13/1998   | 9/9/2003   | 09/042202          | US | CREDIT INITIALIZATION IN SYSTEMS WITH PROACTIVE FLOW CONTROL                                                               |
| 82031216     | Granted | 6735687       | 6/15/2000   | 5/11/2004  | 09/595076          | US | Multithreaded Microprocessor With Asymmetrical Central Processing Units                                                    |
| 82031282     | Granted | 6542860       | 3/22/1999   | 4/1/2003   | 09/273783          | US | System And Method For Detecting Nodes That Are Susceptible To Floating                                                     |
| 82031972     | Granted | 6148437       | 5/4/1998    | 36844      | 09/073197          | US | System And Method For Jump-Evaluated Trace Designation                                                                     |
| 82032719     | Granted | 5966538       | 10/31/1997  | 36445      | 08/960527          | US | METHOD AND APPARATUS FOR AUTOMATICALLY DETERMINING WHICH COMPILER OPTIONS SHOULD BE USED WHEN COMPILING A COMPUTER PROGRAM |
| 82046639     | Granted | 6272598       | 3/22/1999   | 8/7/2001   | 09/273849          | US | WEB CACHE PERFORMANCE BY APPLYING DIFFERENT REPLACEMENT POLICIES TO THE WEB CACHE                                          |
| 82046891     | Granted | 6622300       | 4/21/1999   | 37880      | 09/295548          | US | Dynamic Optimization Of Computer Programs Using Code-Rewriting Kernel Module                                               |
| 82047389     | Granted | 6470438       | 2/22/2000   | 37551      | 09/510253          | US | METHOD AND APPARATUS FOR REDUCING FALSE HITS IN A NON-TAGGED, N-WAY CACHE                                                  |

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| 82047392     | Granted     | 6622209       | 9/30/2002   | 9/16/2003  | 10/262376          | US | USE OF NON-COUNT DATA AND INDEX HASHING TO REDUCE FALSE HITS IN A NON-TAGGED, N-WAY CACHE                              |
| 82068308     | Granted     | 6526482       | 4/1/1998    | 2/25/2003  | 09/647507          | US | Method And Apparatus For Tracking Appended Data On Storage Medium                                                      |
| 82068494     | Granted     | 6625676       | 8/17/2000   | 9/23/2003  | 09/640181          | US | SMALL COMPUTER SYSTEM WITH INTERFACE CONTROL AND METHOD OF OPERATING SAME                                              |
| 82084472     | Granted     | 7587530       | 8/20/2003   | 9/8/2009   | 10/645721          | US | METHOD AND APPARATUS FOR MANAGING DEVICE RESERVATION                                                                   |
| 82094336     | Granted     | 7127554       | 12/29/2003  | 10/24/2006 | 10/745936          | US | WRITING DATA TO A DATA STORAGE, EDO, OM DATA SENS COMMENCING AT A SAME POSITION ALONG THE STORAGE MEDIUM               |
| 82097651     | Granted     | 6945489       | 8/19/2003   | 9/20/2005  | 10/643793          | US | SPLICING TAPE FOR ATTACHING A LEADER TAPE TO DATA TAPE                                                                 |
| 82177556     | Granted     | 7979647       | 9/27/2004   | 7/12/2011  | 10/949191          | US | Method Of Storing Data On A Secondary Storage Device                                                                   |
| 82187921     | Granted     | 7283318       | 6/24/2004   | 10/16/2007 | 10/877641          | US | Position Sensor                                                                                                        |
| 82197164     | Granted     | 7420768       | 10/14/2005  | 9/2/2008   | 11/251510          | US | Cartridge Loading Apparatus                                                                                            |
| 82197347     | Granted     | 7274535       | 11/24/2004  | 9/25/2007  | 10/996882          | US | MEDIA CARTRIDGE HAVING MULTIPLE TAPE POSITION SENSOR WINDOWS                                                           |
| 82210208     | Granted     | 8528575       | 10/3/2005   | 9/10/2013  | 11/242203          | US | Debris Collection Apparatus And Method For Collecting Debris From A Data Storage Library                               |
| 82210898     | Published   |               | 10/26/2005  |            | 11/259222          | US | Efficient Error Reporting From An Operator Control Panel Of A Storage Apparatus                                        |
| 82210901     | Granted     | 7577572       | 10/26/2005  | 8/18/2009  | 11/259221          | US | Service Inventory Prompt And Actions                                                                                   |
| 82215329     | Application |               | 7/26/2006   |            | 11/494293          | US | DATA STORAGE ARRANGEMENT AND KEY DISTRIBUTION                                                                          |
| 82222136     | Granted     | 7333291       | 9/28/2006   | 2/19/2008  | 11/529095          | US | System And Method For Reducing Tracking Noise In A Tape Drive                                                          |
| 82222883     | Granted     | 9104324       | 8/19/2006   | 8/11/2015  | 11/506313          | US | Managing Host Logins To Storage Systems                                                                                |
| 82225259     | Granted     | D627772       | 3/26/2007   | 11/23/2010 | 29/285274          | US | AN OPERATOR CONTROL PANEL WITH DISPLAY AND MULTIPLE FUNCTION BUTTONS FOR A STORAGE LIBRARY                             |
| 82225571     | Published   |               | 1/31/2007   |            | 11/700604          | US | STORAGE LIBRARY WITH REMOVABLE MEDIA                                                                                   |
| 82242299     | Granted     | 8489808       | 10/22/2008  | 7/16/2013  | 12/256353          | US | Systems And Methods Of Presenting Virtual Tape Products To A Client                                                    |
| 82244609     | Granted     | 8284522       | 10/15/2008  | 10/9/2012  | 12/251797          | US | Non-Radial Bearing Preload                                                                                             |
| 82245983     | Granted     | 8347111       | 1/6/2009    | 1/1/2013   | 12/349013          | US | Data Processing Apparatus                                                                                              |
| 82247924     | Granted     | 8059361       | 1/12/2009   | 11/15/2011 | 12/352468          | US | Position Signal Processor                                                                                              |
| 82248107     | Granted     | 8154811       | 3/30/2009   | 4/10/2012  | 12/414491          | US | Measuring Reader/writer Offset In A Tape Drive Head                                                                    |
| 82260410     | Granted     | 8943327       | 1/27/2010   | 1/27/2015  | 12/694780          | US | APPARATUS AND METHOD TO ENABLE OPERATION BETWEEN A MAIN ASSEMBLY AND A SUB-ASSEMBLY THAT ARE CRYPTOGRAPHICALLY RELATED |
| 82261967     | Granted     | 8665552       | 7/12/2010   | 4/1702     | 12/834674          | US | Controlling Positions Of Storage Media Heads                                                                           |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| 82264466     | Granted     | 8289644       | 7/16/2010   | 10/16/2012 | 12/838020          | US | Varying Data Reader Response                                                                                                     |
| 82682115     | Granted     | 8488265       | 5/25/2011   | 7/16/2013  | 13/115205          | US | TAPE STORAGE PROCESSING                                                                                                          |
| 82689128     | Published   |               | 6/29/2011   |            | 13/171888          | US | ACCESS COMMANDS INCLUDING EXPECTED MEDIA POSITIONS                                                                               |
| 82846972     | Granted     | 8654468       | 4/30/2012   | 41688      | 13/459762          | US | MULTI-RATE OVERSAMPLING OF ANALOG SIGNALS IN STORAGE DEVICES                                                                     |
| 82853032     | Granted     | 8724247       | 10/5/2009   | 5/13/2014  | 13/260189          | US | Adjusting A Transducer Head For Transferring Data                                                                                |
| 82961808     | Published   |               | 5/21/2012   |            | 13/476863          | US | SYSTEM AND METHOD FOR DISPLAYING TAPE DRIVE UTILIZATION AND PERFORMANCE DATA                                                     |
| 83014374     | Granted     | 8819664       | 11/1/2012   | 8/26/2014  | 13/666607          | US | UPGRADE FIRMWARE WITH UPGRADE INFORMATION FROM A TAPE CARTRIDGE IN A WIRELESS MANNER                                             |
|              |             |               |             |            |                    |    |                                                                                                                                  |
| 83014500     | Published   |               | 7/13/2012   |            | 13/548780          | US | Method of Forming a Hardened Layer on a Drive Head                                                                               |
| 83015851     | Granted     | 9058844       | 9/20/2012   | 6/16/2015  | 13/623609          | US | Access to Migrated Tapes                                                                                                         |
| 83222735     | Granted     | 7038874       | 5/19/2003   | 5/2/2006   | 10/440694          | US | TAMPER RESISTANT WRITE ONCE RECORDING OF A DATA STORAGE CARTRIDGE HAVING REWRITABLE MEDIA                                        |
|              |             |               |             |            |                    |    |                                                                                                                                  |
| 82245545     | Granted     | 8312242       | 10/30/2008  | 11/13/2012 | 12/261069          | US | Tracking Memory Space In A Storage System                                                                                        |
| 82245551     | Allowed     |               | 10/30/2008  |            | 12/261068          | US | Managing Counters In A Distributed File System                                                                                   |
| 82259783     | Granted     | 8311982       | 2/11/2010   | 11/13/2012 | 12/703858          | US | STORING UPDATE DATA USING A PROCESSING PIPELINE                                                                                  |
| 82261595     | Granted     | 8296358       | 1/11/2010   | 10/23/2012 | 12/685237          | US | METHOD AND SYSTEM FOR JOURNALING DATA UPDATES IN A DISTRIBUTED FILE SYSTEM                                                       |
|              |             |               |             |            |                    |    |                                                                                                                                  |
| 82265399     | Published   |               | 2/25/2011   |            | 13/034900          | US | Retention Management in a WORM Storage System                                                                                    |
| 82265402     | Published   |               | 1/14/2011   |            | 13/006790          | US | Clock Monitoring in a Data-Retention Storage System                                                                              |
| 82604239     | Granted     | 8689226       | 5/11/2011   | 4/1/2014   | 13/105294          | US | ASSIGNING RESOURCES TO PROCESSING STAGES OF A PROCESSING SUBSYSTEM                                                               |
|              |             |               |             |            |                    |    |                                                                                                                                  |
| 84141227     | Application |               | 12/20/2012  |            | 14/433668          | US | RAID STORAGE PROCESSING                                                                                                          |
| 81980090     | Granted     | 6564170       | 12/29/2000  | 5/13/2003  | 09/751010          | US | Customizable User Interfaces                                                                                                     |
| 82070867     | Granted     | 7444412       | 6/7/2002    | 10/28/2008 | 10/165864          | US | Data Processing System And Method                                                                                                |
| 82070990     | Granted     | 7062672       | 6/7/2002    | 6/13/2006  | 10/163878          | US | Method Of And Computer Network Arrangement For Restoring An Impaired Software Image                                              |
| 82082912     | Granted     | 7100159       | 11/4/2002   | 8/29/2006  | 10/287567          | US | Method, Apparatus And Means For Silently Customizing Software Within A Multi-platform Environment                                |
| 82087412     | Granted     | 7051244       | 10/31/2002  | 5/23/2006  | 10/285076          | US | Method And Apparatus For Managing Incident Reports                                                                               |
| 82087781     | Granted     | 7051320       | 8/22/2002   | 5/23/2006  | 10/226515          | US | Diagnostic Tool For A Plurality Of Networked Computers With Incident Escalator And Relocation Of Information To Another Computer |
| 82090346     | Granted     | 7188171       | 1/23/2003   | 3/6/2007   | 10/349773          | US | Method And Apparatus For Software And Hardware Event Monitoring And Repair                                                       |

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| 82092776     | Granted   | 7277936       | 3/3/2003    | 10/2/2007  | 10/376305          | US | A System Using Network Topology To Perform Fault Diagnosis To Locate Fault Between Monitoring And Monitored Devices Based On Reply From Device At Switching Layer |
| 82170818     | Granted   | 7634077       | 5/17/2004   | 12/15/2009 | 10/846630          | US | System For Providing Support For An Electronic Device                                                                                                             |
| 82185617     | Granted   | 7769720       | 6/16/2004   | 8/3/2010   | 10/869730          | US | SYSTEMS AND METHODS FOR MIGRATING A SERVER FROM ONE PHYSICAL PLATFORM TO A DIFFERENT PHYSICAL PLATFORM                                                            |
| 82224887     | Granted   | 7974932       | 10/20/2006  | 7/5/2011   | 11/584711          | US | Service Utility Pricing Model                                                                                                                                     |
| 82248296     | Granted   | 8174829       | 1/29/2009   | 5/8/2012   | 12/361610          | US | Cooling Electronic Devices Provided In Rows Of Racks                                                                                                              |
| 82257350     | Published |               | 8/14/2007   |            | 11/838795          | US | APPARATUS, AND ASSOCIATED METHOD, FOR MAINTAINING AN ASSET REPOSITORY                                                                                             |
| 83138782     | Granted   | 8918763       | 1/30/2013   | 12/23/2014 | 13/754467          | US | MARKED TEST SCRIPT CREATION                                                                                                                                       |
| 84072969     | Allowed   |               | 6/26/2012   |            | 14/394257          | US | METHOD AND SYSTEM FOR ENVIRONMENTAL WATERMARKING                                                                                                                  |
| 82092713     | Granted   | 8689096       | 11/19/2001  | 4/1/2014   | 10/495670          | US | Computer-based Method, Software Module And Computer Program Product For Processing Information In Transaction-tax Related Applications                            |
| 81990329     | Granted   | 6859526       | 7/3/2001    | 2/22/2005  | 09/898353          | US | System And Program Product For Managing Call Information                                                                                                          |
| 81990701     | Granted   | 8036983       | 1/18/2002   | 10/11/2011 | 10/052608          | US | System For And Method Of Web Based Non-wage Compensation                                                                                                          |
| 82164326     | Granted   | 5860133       | 12/1/1995   | 1/12/1999  | 08/565751          | US | METHOD FOR ALTERING MEMORY CONFIGURATION AND SIZING MEMORY MODULES WHILE MAINTAINING SOFTWARE CODE STREAM COHERENCE                                               |
| 82165136     | Granted   | 5842017       | 1/29/1996   | 11/24/1998 | 08/593756          | US | METHOD AND APPARATUS FOR FORMING A TRANSLATION UNIT                                                                                                               |
| 82165757     | Granted   | 6009521       | 10/23/1998  | 12/28/1999 | 09/178184          | US | System For Assigning Boot Strap Processor In Symmetric Multiprocessor Computer With Watchdog Reassignment                                                         |
| 82165823     | Granted   | 6101608       | 2/20/1997   | 8/8/2000   | 08/804097          | US | METHOD AND APPARATUS FOR SECURE REMOTE WAKE-UP OF A COMPUTER OVER A NETWORK                                                                                       |
| 82167758     | Granted   | 7348498       | 7/17/2003   | 3/25/2008  | 10/621661          | US | Partially Voided Anti-pads                                                                                                                                        |
| 82177811     | Granted   | 8473673       | 6/24/2005   | 6/25/2013  | 11/166608          | US | Memory Controller Based (de)compression                                                                                                                           |
| 82178870     | Granted   | 8230275       | 5/26/2005   | 7/24/2012  | 11/138005          | US | Use Of Parity Bits To Detect Memory Installation Defects                                                                                                          |
| 82179368     | Granted   | 7444681       | 1/12/2004   | 10/28/2008 | 10/756473          | US | Security Measures In A Partitionable Computing System                                                                                                             |
| 82180808     | Granted   | 7403396       | 1/20/2005   | 7/22/2008  | 11/039042          | US | Communicating With An Electronic Module That Is Slidably Mounted In A System                                                                                      |
| 82181741     | Granted   | 7908422       | 6/10/2009   | 3/15/2011  | 12/481628          | US | System And Method For A Distributed Crossbar Network Using A Plurality Of Crossbars                                                                               |
| 82182365     | Granted   | 7600082       | 11/30/2004  | 10/6/2009  | 11/000279          | US | Virtualization Logic                                                                                                                                              |

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| 82133493     | Granted   | 7652896       | 12/29/2004  | 1/26/2010  | 11/027431          | US | Component For Impedance Matching                                                                     |
| 82189358     | Granted   | 7694926       | 7/11/2007   | 4/13/2010  | 11/776252          | US | Mounting Bracket                                                                                     |
| 82195730     | Granted   | D514109       | 10/25/2004  | 1/31/2006  | 29/215774          | US | Computer Having An External Panel                                                                    |
| 82197287     | Granted   | 8046196       | 5/2/2008    | 10/25/2011 | 12/114673          | US | Modular Networked Sensor Assembly                                                                    |
| 82209965     | Granted   | D551620       | 8/3/2005    | 9/25/2007  | 29/235638          | US | Computer Power Supply Having A Front Bezel                                                           |
| 82217330     | Granted   | 7908470       | 10/31/2006  | 3/15/2011  | 11/590080          | US | Multi-processor Computer With Plural Boot Memories                                                   |
| 82220510     | Granted   | 6325636       | 7/20/2000   | 12/4/2001  | 09/625002          | US | Passive Midplane For Coupling Web Server Processing Chips With A Network Interface(s)                |
| 82221890     | Granted   | 7619897       | 10/31/2006  | 11/17/2009 | 11/590127          | US | USER INTERFACE MODULE FOR A SERVER CHASSIS                                                           |
| 82222139     | Granted   | 7941655       | 10/31/2006  | 5/10/2011  | 11/590092          | US | Extensible Firmware Interface With Pre-start Configuration Phase For Computers                       |
| 82226066     | Granted   | 7498524       | 4/23/2007   | 3/3/2009   | 11/738895          | US | ENCLOSURE AND GASKET ASSEMBLY FOR REDUCING EMI                                                       |
| 82238054     | Granted   | 8037578       | 5/20/2008   | 10/18/2011 | 12/123657          | US | Low-profile Assemblies                                                                               |
| 82238060     | Granted   | 7723621       | 5/21/2008   | 5/25/2010  | 12/124670          | US | Flexible Gasket                                                                                      |
| 82240616     | Granted   | 7768787       | 9/25/2008   | 8/3/2010   | 12/238303          | US | Electronic Device With Modular Bezel, And Method Of Configuring Electronic Device With Modular Bezel |
| 82244675     | Granted   | 9058466       | 10/28/2008  | 6/16/2015  | 12/259387          | US | ENABLING SECURITY OF A COMPUTER SYSTEM                                                               |
| 82245239     | Granted   | 8225031       | 10/30/2008  | 7/17/2012  | 12/262063          | US | MEMORY MODULE INCLUDING ENVIRONMENTAL OPTIMIZATION                                                   |
| 82246673     | Granted   | 8509960       | 7/31/2009   | 8/13/2013  | 12/533990          | US | PROVIDING COOLING TO A COMPUTER SYSTEM VIA A PEDESTAL HAVING A COOLING FAN                           |
| 82260473     | Granted   | 8237579       | 12/11/2009  | 8/7/2012   | 12/635923          | US | Reference Signal Synchronized To Clock Signal                                                        |
| 82264838     | Granted   | 8411436       | 10/26/2010  | 4/2/2013   | 12/912390          | US | HEAT SINK ASSEMBLY CONTAINER                                                                         |
| 82554401     | Published |               | 6/20/2008   |            | 12/999942          | US | LOW LEVEL INITIALIZER                                                                                |
| 82846915     | Granted   | D672354       | 10/13/2011  | 12/11/2012 | 29/403999          | US | Cover Plate for A Computing Device                                                                   |
| 82852305     | Granted   | 8570744       | 10/30/2009  | 41576      | 13/379393          | US | A COLD PLATE HAVING BLADES THAT INTERLEAVE WITH MEMORY MODULES                                       |
| 82901954     | Published |               | 3/15/2012   |            | 13/421457          | US | SUPPORT MEMBER TO POSITION A SYSTEM BOARD                                                            |
| 82949654     | Granted   | 8473687       | 5/5/2012    | 6/25/2013  | 13/464982          | US | Computer Cache System With Stratified Replacement                                                    |
| 82962678     | Granted   | 9121422       | 5/31/2012   | 9/1/2015   | 13/484609          | US | System Board Fastener                                                                                |
| 83038164     | Granted   | D700612       | 7/31/2012   | 41702      | 29/428441          | US | A Removable Bezel of a Computing Device with an LCD Display                                          |
| 83096223     | Granted   | 9149753       | 3/26/2013   | 10/6/2015  | 13/850801          | US | Filter Member                                                                                        |
| 83136240     | Allowed   |               | 6/7/2010    |            | 13/702117          | US | MODULE AND PORT                                                                                      |
| 83140963     | Granted   | D705784       | 1/4/2013    | 5/27/2014  | 29/441454          | US | BEZEL FOR A COMPUTING DEVICE                                                                         |
| 83543109     | Published |               | 4/27/2011   |            | 14/005255          | US | ROTATIONAL LOCKOUT                                                                                   |
| 83689698     | Granted   | D740293       | 11/11/2013  | 10/6/2015  | 29/472319          | US | A Removable Bezel of a Computing Device with an LCD Display                                          |
| 84088578     | Published |               | 4/27/2012   |            | 14/396731          | US | BLADE ENCLOSURE                                                                                      |
| 84122564     | Granted   | D724081       | 3/5/2013    | 3/10/2015  | 29/447626          | US | Top Loading Fan Cartridge                                                                            |

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| 84171323     | Application |               | 5/29/2015   |            | 14/726017          | US | RACK MOUNTABLE POWER DISTRIBUTION UNITS                                                                                                              |
| 84291360     | Application |               | 6/30/2015   |            | 29/532002          | US | MICROSERVER                                                                                                                                          |
| 81951182     | Granted     | 5883824       | 11/29/1993  | 36235      | 08/158649          | US | Parallel Adding And Averaging Circuit And Method                                                                                                     |
| 81994571     | Granted     | 6832308       | 2/15/2000   | 12/14/2004 | 09/505249          | US | Apparatus And Method For Instruction Fetch Unit                                                                                                      |
| 82000376     | Granted     | 6836127       | 7/27/2001   | 12/28/2004 | 09/916408          | US | Dual Switching Reference Voltages                                                                                                                    |
| 82004870     | Granted     | 6772402       | 5/2/2002    | 38202      | 10/136338          | US | Failure Path Grouping Method, Apparatus, And Computer Readable Medium                                                                                |
| 82013489     | Granted     | 5889979       | 5/24/1996   | 3/30/1999  | 08/653645          | US | Transparent Data-Triggered Pipeline Latch                                                                                                            |
| 82013492     | Granted     | 5757687       | 8/6/1996    | 35941      | 08/692655          | US | Method And Apparatus For Bounding Alignment Shifts In A Processor                                                                                    |
|              |             |               |             |            |                    |    | Enable At-Speed Denormalized Result Generation In An FMA3 Processor                                                                                  |
| 82015109     | Granted     | 5809275       | 3/1/1996    | 9/15/1998  | 08/609581          | US | STORE-TO-LOAD HAZARD RESOLUTION SYSTEM AND METHOD FOR A PROCESSOR THAT EXECUTES INSTRUCTIONS OUT OF ORDER                                            |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82015112     | Granted     | 5838942       | 3/1/1996    | 11/17/1998 | 08/609807          | US | Panic Trap System And Method                                                                                                                         |
| 82019045     | Granted     | 5748934       | 5/31/1996   | 5/5/1998   | 08/658922          | US | Operand Dependency Tracking System And Method For A Processor That Executes Instructions Out Of Order And That Permits Multiple Precision Data Words |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82022294     | Granted     | 5838692       | 11/14/1996  | 36116      | 08/749121          | US | System And Method For Extracting Realtime Debug Signals From An Integrated Circuit                                                                   |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82024979     | Granted     | 6313523       | 10/28/1999  | 11/6/2001  | 09/429512          | US | IC Die Power Connection Using Canted Coil Spring                                                                                                     |
| 82055630     | Granted     | 6240523       | 7/30/1999   | 5/29/2001  | 09/365055          | US | METHOD AND APPARATUS FOR AUTOMATICALLY DETERMINING THE PHASE RELATIONSHIP BETWEEN TWO CLOCKS GENERATED FROM THE SAME SOURCE                          |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82083479     | Granted     | 6769102       | 7/19/2002   | 38195      | 10/199127          | US | VERIFYING PROXIMITY OF GROUND METAL TO SIGNAL TRACES IN AN INTEGRATED CIRCUIT                                                                        |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82084409     | Granted     | 7085959       | 7/3/2002    | 38930      | 10/187833          | US | Method And Apparatus For Recovery From Loss Of Lock Step                                                                                             |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82084973     | Granted     | 8463578       | 7/16/2004   | 6/11/2013  | 10/892231          | US | Hardware Based Utilization Metering                                                                                                                  |
| 82085975     | Granted     | 6820021       | 11/1/2002   | 38307      | 10/286679          | US | System And Method For Generating A SHMOO Plot By Varying The Resolution Thereof                                                                      |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82096277     | Granted     | 7869516       | 3/31/2003   | 1/11/2011  | 10/403864          | US | MOTION ESTIMATION USING BIT-WISE BLOCK COMPARISONS FOR VIDEO COMPRESSION                                                                             |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82117316     | Granted     | 6779142       | 8/31/2000   | 8/17/2004  | 09/653642          | US | APPARATUS AND METHOD FOR INTERFACING A HIGH SPEED SCAN-PATH WITH SLOW-SPEED TEST EQUIPMENT                                                           |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82118126     | Granted     | 6754057       | 9/29/2001   | 6/22/2004  | 09/967763          | US | CAPACITOR DAMAGE ARRESTOR                                                                                                                            |
| 82120619     | Granted     | 7149814       | 1/4/2002    | 12/12/2006 | 10/037689          | US | METHOD AND APPARATUS TO PROVIDE SOUND ON A REMOTE CONSOLE                                                                                            |
|              |             |               |             |            |                    |    |                                                                                                                                                      |
| 82120622     | Granted     | 7085385       | 1/4/2002    | 8/1/2006   | 10/037491          | US | Method And Apparatus For Initiating Strong Encryption Using Existing SSL Connection For Secure Key Exchange                                          |

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| 82127303     | Granted | 5740454       | 12/20/1995  | 4/14/1998  | 08/576193          | US | CIRCUIT FOR SETTING COMPUTER SYSTEM BUS SIGNALS TO PREDETERMINED STATES IN LOW POWER MODE                                  |
| 82127612     | Granted | 5943482       | 6/5/1996    | 8/24/1999  | 08/6558602         | US | EXPANSION CARD INSERTION AND REMOVAL                                                                                       |
| 82127924     | Granted | 5747893       | 5/10/1996   | 5/5/1998   | 08/644228          | US | TERMINATION SCHEME FOR TWISTED-WIRE PAIRS                                                                                  |
| 82128740     | Granted | 6233242       | 12/30/1996  | 5/15/2001  | 08/774557          | US | NETWORK SWITCH WITH SHARED MEMORY SYSTEM                                                                                   |
| 82128863     | Granted | 6222840       | 12/30/1996  | 4/24/2001  | 08/774547          | US | METHOD AND SYSTEM FOR PERFORMING CONCURRENT READ AND WRITE CYCLES IN A NETWORK SWITCH                                      |
| 82130237     | Granted | 6268845       | 6/30/1997   | 7/31/2001  | 08/885090          | US | BEZEL BUTTON CONTROLS OVER USB                                                                                             |
| 82130858     | Granted | 6167403       | 5/14/1998   | 12/26/2000 | 09/078721          | US | NETWORK DEVICE WITH A MANAGEMENT INFORMATION BASE INCLUDING A PLURALITY OF SELECTABLE TRAP DEFINITIONS                     |
| 82131422     | Granted | 6246666       | 4/9/1998    | 37054      | 09/058043          | US | METHOD AND APPARATUS FOR CONTROLLING AN INPUT/OUTPUT SUBSYSTEM IN A FAILED NETWORK SERVER                                  |
| 82135793     | Granted | 6108770       | 6/24/1998   | 8/22/2000  | 09/103984          | US | METHOD AND APPARATUS FOR PREDICTING MEMORY DEPENDENCE USING STORE SETS                                                     |
| 82136855     | Granted | 6272624       | 4/2/1999    | 37110      | 09/285529          | US | METHOD AND APPARATUS FOR PREDICTING MULTIPLE CONDITIONAL BRANCHES                                                          |
| 82137038     | Granted | 6360241       | 4/20/1999   | 3/19/2002  | 09/294597          | US | COMPUTER METHOD AND APPARATUS FOR DIVISION AND SQUARE ROOT OPERATIONS USING SIGNED DIGIT                                   |
| 82137041     | Granted | 6564239       | 12/14/2001  | 5/13/2003  | 10/016902          | US | COMPUTER METHOD AND APPARATUS FOR DIVISION AND SQUARE ROOT OPERATIONS USING SIGNED DIGIT                                   |
| 82137044     | Granted | 6779012       | 4/18/2003   | 8/17/2004  | 10/419454          | US | COMPUTER METHOD AND APPARATUS FOR DIVISION AND SQUARE ROOT OPERATIONS USING SIGNED DIGIT                                   |
| 82137170     | Granted | 6133717       | 9/30/1998   | 10/17/2000 | 09/164416          | US | METHODS AND APPARATUS FOR SYNCHRONIZING A PLURALITY OF POWER SUPPLIES                                                      |
| 82161266     | Granted | 6018771       | 11/25/1992  | 1/25/2000  | 07/981274          | US | DYNAMIC ASSIGNMENT OF MULTICAST NETWORK ADDRESSES                                                                          |
| 82165445     | Granted | 6073159       | 12/31/1996  | 6/6/2000   | 08/775553          | US | THREAD PROPERTIES ATTRIBUTE VECTOR BASED THREAD SELECTION IN MULTITHREADING PROCESSOR                                      |
| 82165571     | Granted | 6085294       | 10/24/1997  | 7/4/2000   | 08/957129          | US | DISTRIBUTED DATA DEPENDENCY STALL MECHANISM                                                                                |
| 82165574     | Granted | 6249846       | 4/11/2000   | 6/19/2001  | 09/547163          | US | DISTRIBUTED DATA DEPENDENCY STALL MECHANISM                                                                                |
| 82165634     | Granted | 6122714       | 10/24/1997  | 9/19/2000  | 08/957298          | US | ORDER SUPPORTING MECHANISMS FOR USE IN A SWITCH-BASED MULTI-PROCESSOR SYSTEM                                               |
| 82171001     | Granted | 7746872       | 5/21/2004   | 6/29/2010  | 10/850672          | US | Packet Routing As A Function Of Direction                                                                                  |
| 82175876     | Granted | 8000322       | 3/14/2005   | 8/16/2011  | 11/079414          | US | Crossbar Switch Debugging                                                                                                  |
| 82193357     | Granted | 7447900       | 9/15/2004   | 11/4/2008  | 10/942171          | US | METHOD AND A SYSTEM FOR DESIGNATING A USER SELECTED CONSOLE DEVICE AS THE PRIMARY CONSOLE DEVICE FOR A PARTICULAR COMPUTER |

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| 82194725     | Granted   | 7467306       | 3/8/2005    | 12/16/2008 | 11/074424          | US | Methods And Systems For Allocating Power To An Electronic Device                                           |
| 82197098     | Granted   | 8467489       | 8/24/2005   | 6/18/2013  | 11/210929          | US | Data Clock Recovery System And Method Employing Delayed Data Clock Phase Shifting                          |
| 82199849     | Granted   | 7661003       | 1/21/2005   | 2/9/2010   | 11/040394          | US | SYSTEMS AND METHODS FOR MAINTAINING PERFORMANCE OF AN INTEGRATED CIRCUIT WITHIN A WORKING POWER LIMIT      |
| 82202093     | Granted   | 9104894       | 12/16/2005  | 8/11/2015  | 11/303113          | US | Hardware Enablement Using An Interface                                                                     |
| 82208336     | Granted   | 7543173       | 8/2/2005    | 6/2/2009   | 11/195274          | US | Timestamp Generator                                                                                        |
| 82217705     | Granted   | 8522042       | 10/31/2006  | 8/27/2013  | 11/590293          | US | Method And Apparatus For Enforcement Of Software Licenses Protection                                       |
| 82220513     | Granted   | 6411506       | 7/20/2000   | 6/25/2002  | 09/620107          | US | High Density Web Server Chassis System And Method                                                          |
| 82220579     | Granted   | 7774652       | 9/19/2006   | 8/10/2010  | 11/523472          | US | Circuitry And Method To Detect Conditions Of Data                                                          |
| 82220948     | Granted   | 8688933       | 8/31/2006   | 4/1/2014   | 11/514010          | US | Firmware Component Modification                                                                            |
| 82221260     | Granted   | 8661162       | 10/26/2006  | 2/25/2014  | 11/588903          | US | Address Handling                                                                                           |
| 82225448     | Allowed   |               | 9/28/2007   |            | 11/663842          | US | Method And System For Migrating Critical Resources Within Computer Systems                                 |
| 82238183     | Granted   | 8358591       | 6/5/2008    | 1/22/2013  | 12/156925          | US | Network Traffic Monitoring In A Server Network Environment                                                 |
| 82241681     | Granted   | 8201166       | 4/30/2008   | 6/12/2012  | 12/113062          | US | VIRTUALIZATION PLATFORM CONFIGURED WITH VIRTUAL CONNECT CONTROL                                            |
| 82259093     | Granted   | 8521940       | 10/27/2009  | 8/27/2013  | 12/606339          | US | Paired Node Controllers                                                                                    |
| 82260467     | Granted   | 8214702       | 11/9/2009   | 7/3/2012   | 12/614512          | US | Distributed Joint Test Access Group Test Bus Controller Architecture                                       |
| 82999249     | Granted   | 8464005       | 5/4/2012    | 6/11/2013  | 13/464689          | US | Accessing Common Registers In A Multi-core Processor                                                       |
| 83167836     | Published |               | 10/19/2010  |            | 13/817852          | US | SYSTEMS AND METHODS FOR PREDICTIVE CONTROL OF POWER EFFICIENCY                                             |
| 84114672     | Published |               | 11/26/2014  |            | 14/554423          | US | Systems And Methods For Determining Electrical Connectivity                                                |
| 81972533     | Granted   | 6957433       | 1/8/2001    | 10/18/2005 | 09/757269          | US | System And Method For Adaptive Performance Optimization Of Data Processing Systems                         |
| 81988832     | Granted   | 7167965       | 4/30/2001   | 1/23/2007  | 09/843882          | US | Method And System For Online Data Migration On Storage Systems With Performance Guarantees                 |
| 81988889     | Granted   | 6802023       | 3/15/2001   | 38265      | 09/810102          | US | Redundant Controller Data Storage System Having Hot Insertion System And Method                            |
| 81993140     | Granted   | 6874050       | 1/16/2002   | 3/29/2005  | 10/051478          | US | Circuit And Method For Expanding A Serial Bus                                                              |
| 82002437     | Granted   | 6825411       | 5/6/2003    | 11/30/2004 | 10/430728          | US | Method And Apparatus For Controlling Electromagnetic Radiation Emissions From Electronic Device Enclosures |

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| 82012175     | Granted | 6092168       | 10/25/1996  | 36725      | 08/738132          | US | DATA STORAGE SYSTEM AND METHOD FOR DEALLOCATING SPACE BY WRITING AND DETECTING A PREDEFINED DATA PATTERN                 |
| 82029656     | Granted | 6028766       | 7/18/1997   | 2/22/2000  | 08/896932          | US | STRATEGICALLY PLACED COMPLIANCE BUMPS FOR SHOCK ATTENUATION                                                              |
| 82080668     | Granted | 6898667       | 5/23/2002   | 5/24/2005  | 10/154870          | US | Managing Data In A Multi-Level RAID Storage Array                                                                        |
| 82082915     | Granted | 7529966       | 8/20/2004   | 5/5/2009   | 10/922730          | US | Storage System With Journaling                                                                                           |
| 82086722     | Granted | 6606690       | 2/20/2001   | 8/12/2003  | 09/785473          | US | System And Method For Accessing A Storage Area Network As Network Attached Storage                                       |
| 82117247     | Granted | 6996691       | 8/29/2003   | 38755      | 10/652328          | US | Method For Transaction Command Ordering In A Remote Data Replication System                                              |
| 82119869     | Granted | 6775790       | 6/1/2001    | 8/10/2004  | 09/872980          | US | DISTRIBUTED FINE-GRAINED ENHANCEMENTS FOR DISTRIBUTED TABLE DRIVEN I/O MAPPING                                           |
| 82119935     | Granted | 6880052       | 3/26/2002   | 38454      | 10/106906          | US | STORAGE AREA NETWORK, DATA REPLICATION AND STORAGE CONTROLLER, AND METHOD FOR REPLICATING DATA USING VIRTUALIZED VOLUMES |
| 82119938     | Granted | 6934826       | 3/26/2002   | 8/23/2005  | 10/106904          | US | System and method for dynamically allocating memory and managing memory allocated to logging in a storage area network   |
| 82120061     | Granted | 7318149       | 9/28/2001   | 39455      | 09/965998          | US | SEMI-PERSISTENT RELOCATABLE RAM-BASED VIRTUAL FLOPPY DISK METHOD                                                         |
| 82120064     | Granted | 7822961       | 10/31/2007  | 10/26/2010 | 11/931652          | US | SEMI-PERSISTENT RELOCATABLE RAM-BASED VIRTUAL FLOPPY DISK METHOD                                                         |
| 82120556     | Granted | 8046469       | 10/22/2001  | 40841      | 10/043924          | US | System And Method For Interfacing With Virtual Storage                                                                   |
| 82121684     | Granted | 6898668       | 6/24/2002   | 38496      | 10/179727          | US | System And Method For Reorganizing Data In A Raid Storage System                                                         |
| 82121687     | Granted | 7281089       | 2/28/2005   | 10/9/2007  | 11/068550          | US | System And Method For Reorganizing Data In A Raid Storage System                                                         |
| 82126931     | Granted | 5737744       | 10/13/1995  | 4/7/1998   | 08/542709          | US | DISK ARRAY CONTROLLER FOR PERFORMING EXCLUSIVE OR OPERATIONS                                                             |
| 82132487     | Granted | 6209023       | 1/5/1999    | 3/27/2001  | 09/225437          | US | SUPPORTING A SCSI DEVICE ON A NON-SCSI TRANSPORT MEDIUM OF A NETWORK                                                     |
| 82133417     | Granted | 6675253       | 4/4/2000    | 1/6/2004   | 09/542309          | US | DYNAMIC ROUTING OF DATA ACROSS MULTIPLE DATA PATHS FROM A SOURCE CONTROLLER TO A DESTINATION CONTROLLER                  |
| 82164887     | Granted | 5774643       | 10/13/1995  | 6/30/1998  | 08/542536          | US | ENHANCED RAID WRITE HOLE PROTECTION AND RECOVERY                                                                         |
| 82166012     | Granted | 7353277       | 11/14/2000  | 4/1/2008   | 09/712101          | US | Dynamic Load Balancing Of Video Requests                                                                                 |

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| 82172504     | Allowed   |               | 2/1/2005    |            | 11/048520          | US | Automated Selection Of An Optimal Path Between A Computer Switch And Teamed Network Resources Of A Computer System |
| 82175435     | Granted   | 7363541       | 2/23/2004   | 4/22/2008  | 10/785500          | US | Command Management Using Task Attributes                                                                           |
| 82182242     | Granted   | 8650267       | 12/5/2003   | 2/11/2014  | 10/728465          | US | Method And System For Switching Between Remote Control Sessions                                                    |
| 82182932     | Granted   | 8090837       | 5/27/2004   | 1/3/2012   | 10/856263          | US | Communication In Multiprocessor Using Proxy Sockets                                                                |
| 82185179     | Granted   | 7299385       | 7/28/2004   | 11/20/2007 | 10/900948          | US | Managing A Fault Tolerant System                                                                                   |
| 82189799     | Granted   | 7739418       | 4/12/2004   | 6/15/2010  | 10/823241          | US | Resource Management System                                                                                         |
| 82192358     | Granted   | 8375114       | 4/9/2004    | 2/12/2013  | 10/821832          | US | Device Loading In Storage Networks                                                                                 |
| 82205279     | Granted   | 8706687       | 1/24/2007   | 4/22/2014  | 11/626678          | US | Log Driven Storage Controller With Network Persistent Memory                                                       |
| 82217576     | Granted   | 7840877       | 10/31/2006  | 11/23/2010 | 11/590129          | US | Mass Storage System And Method                                                                                     |
| 82222448     | Granted   | 7853821       | 5/11/2006   | 12/14/2010 | 11/432258          | US | Identifying One Or More Storage Devices Causing A Failure Condition During Discovery Of Storage Devices            |
| 82224200     | Granted   | 8005013       | 6/12/2007   | 8/23/2011  | 11/761378          | US | Managing Connectivity In A Virtual Network                                                                         |
| 82224632     | Granted   | 8909742       | 12/18/2006  | 12/9/2014  | 11/612434          | US | Distributed Configuration Of Network Interface Cards                                                               |
| 82227815     | Granted   | 7991746       | 4/8/2008    | 8/2/2011   | 12/099696          | US | Storage System And Method                                                                                          |
| 82227821     | Published |               | 4/24/2008   |            | 12/109294          | US | A Storage Management System                                                                                        |
| 82236746     | Published |               | 1/3/2008    |            | 12/810180          | US | Performing Mirroring Of A Logical Storage Unit                                                                     |
| 82239428     | Granted   | 7937548       | 7/3/2008    | 5/3/2011   | 12/167251          | US | System And Method For Improved Snapclone Performance In A Virtualized Storage System                               |
| 82249166     | Granted   | 8588607       | 1/29/2009   | 11/19/2013 | 12/362484          | US | Dispersion Scheme For Physical Layer Diagnosis In Bi-directional Dual-fiber Optical Networks                       |
| 82249793     | Granted   | 8370571       | 4/8/2009    | 2/5/2013   | 12/420405          | US | TRANSFER CONTROL OF A STORAGE VOLUME BETWEEN STORAGE CONTROLLERS IN A CLUSTER                                      |
| 82250105     | Granted   | 8145850       | 8/7/2009    | 3/27/2012  | 12/537256          | US | Method And System For Visualizing A Storage Area Network                                                           |
| 82258031     | Granted   | 8370833       | 4/10/2008   | 2/5/2013   | 12/101051          | US | Method And System For Implementing A Virtual Storage Pool In A Virtual Environment                                 |
| 82259156     | Granted   | 8638233       | 10/12/2010  | 1/28/2014  | 12/902359          | US | Cable Connection Component Configured To Provide Visible Indications                                               |
| 82259162     | Granted   | 8287302       | 10/12/2010  | 10/16/2012 | 12/902443          | US | Cable End Connectors                                                                                               |
| 82259285     | Published |               | 3/12/2010   |            | 12/722708          | US | Detecting Engagement Conditions Of A Fiber Optic Connector                                                         |
| 82259972     | Granted   | 8291171       | 11/30/2009  | 10/16/2012 | 12/627677          | US | ALTERING PREFETCH DEPTH BASED ON READY DATA                                                                        |
| 82261532     | Granted   | 8364905       | 8/16/2010   | 1/29/2013  | 12/857306          | US | STORAGE SYSTEM WITH MIDDLE-WAY LOGICAL VOLUME                                                                      |
| 82407497     | Granted   | 8392931       | 12/16/2010  | 3/5/2013   | 12/969981          | US | Data Transfer Protocol For Data Replication Between Multiple Pairs Of Storage Controllers On A SAN Fabric          |
| 82578769     | Granted   | 7543100       | 6/18/2001   | 6/2/2009   | 09/883681          | US | Node Controller for a Data Storage System                                                                          |

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| 82578792     | Granted     | 7162654       | 1/4/2001    | 1/9/2007   | 09/755254          | US | Isolation of 12C Buses In A Multiple Power Domain Environment Using Switches                                                    |
| 82578829     | Granted     | 7124324       | 8/22/2002   | 10/17/2006 | 10/226762          | US | Method of Testing Fibre Channel Ports in a Storage Server                                                                       |
| 82578832     | Granted     | 7146521       | 8/21/2002   | 12/5/2006  | 10/226823          | US | Full Bandwidth Without Connection to External Devices Preventing Damage of Storage Devices and Data Loss in Data Storage System |
| 82578875     | Granted     | 7444489       | 11/7/2005   | 10/28/2008 | 11/269024          | US | Applications for Non-Disruptively Moving Data Between Logical Disk Regions in a Data Storage System                             |
| 82585719     | Published   |               | 4/5/2011    |            | 13/080041          | US | ERROR LOGGING IN A STORAGE DEVICE                                                                                               |
| 82651066     | Published   |               | 8/30/2008   |            | 13/061493          | US | Use Of Hybrid PCB Materials In Printed Circuit Boards                                                                           |
| 82654415     | Granted     | 8566542       | 1/6/2011    | 10/22/2013 | 12/985893          | US | Backup Using Storage Array LUN Level Snapshot                                                                                   |
| 82799736     | Granted     | 8984502       | 10/28/2011  | 3/17/2015  | 13/284640          | US | SYSTEMS AND METHODS FOR COMPOSING OR DECOMPOSING A COMPOSITE IMAGE FOR FIRMWARE UPDATE IMAGES                                   |
| 82832992     | Granted     | 8958997       | 11/30/2011  | 2/17/2015  | 13/307192          | US | UNINTERRUPTIBLE POWER SUPPLY TESTING                                                                                            |
| 82852259     | Published   |               | 9/27/2011   |            | 13/246504          | US | Link Throughput Enhancer                                                                                                        |
| 82899833     | Granted     | 8959191       | 4/6/2012    | 2/17/2015  | 13/441349          | US | SCRIPT MODIFICATION SUGGESTION                                                                                                  |
| 82961785     | Granted     | 8694826       | 2/29/2012   | 4/8/2014   | 13/407982          | US | SAS HOST CACHE CONTROL                                                                                                          |
| 83014477     | Granted     | 8972618       | 7/31/2012   | 3/3/2015   | 13/563166          | US | STAGED DISCOVERY IN A DATA STORAGE FABRIC                                                                                       |
| 83021244     | Published   |               | 7/28/2010   |            | 13/702759          | US | File Based Cache Loading                                                                                                        |
| 83038184     | Granted     | 8924751       | 7/31/2012   | 12/30/2014 | 13/563634          | US | SAS Power Management                                                                                                            |
| 83094852     | Published   |               | 5/7/2010    |            | 13/639511          | US | Workload Performance Control                                                                                                    |
| 83102589     | Granted     | 9009562       | 1/30/2013   | 4/14/2015  | 13/753902          | US | PROVIDING MEMORY PROTECTION USING A MODIFIED ERROR CORRECTION CODE                                                              |
| 83137597     | Granted     | D682265       | 1/25/2013   | 5/14/2013  | 29/444113          | US | Hard Drive Carrier                                                                                                              |
| 83139449     | Granted     | 9009526       | 1/24/2013   | 4/14/2015  | 13/748923          | US | REBUILDING DRIVE DATA                                                                                                           |
| 83206021     | Published   |               | 5/31/2013   |            | 13/907807          | US | STORAGE UNIT PERFORMANCE ADJUSTMENT                                                                                             |
| 83873857     | Published   |               | 10/25/2011  |            | 14/349675          | US | ENVIRONMENTAL DATA RECORD                                                                                                       |
| 83952228     | Published   |               | 5/1/2012    |            | 14/368761          | US | PREARRANGING DATA TO COMMIT TO NON-VOLATILE MEMORY                                                                              |
| 84141147     | Published   |               | 10/31/2012  |            | 14/427073          | US | WRITING STANDARD TAPE FORMAT TO MEMORY                                                                                          |
| 84141167     | Application |               | 12/11/2012  |            | 14/428453          | US | APPLICATION SERVER TO NVRAM PATH                                                                                                |
| 84228927     | Application |               | 5/14/2015   |            | 14/712002          | US | SYSTEM AND METHOD FOR CABLE MONITORING                                                                                          |
| 82022852     | Granted     | 6192439       | 8/11/1998   | 2/20/2001  | 09/132620          | US | PCI-COMPLIANT INTERRUPT STEERING ARCHITECTURE                                                                                   |
| 82102139     | Granted     | 7136957       | 3/24/2004   | 11/14/2006 | 10/808881          | US | Device Bandwidth Management Using A Bus Configuration Multiplexer                                                               |
| 82121807     | Granted     | 7577877       | 5/22/2003   | 40043      | 10/444154          | US | MECHANISMS TO PREVENT UNDESIRABLE BUS BEHAVIOR                                                                                  |
| 82126553     | Granted     | 5841446       | 11/1/1996   | 36123      | 08/742881          | US | METHOD AND APPARATUS FOR ADDRESS MAPPING OF A VIDEO MEMORY USING TILING                                                         |

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| 82127987     | Granted     | 6269273       | 6/16/1998   | 7/31/2001  | 09/098077          | US | DELIVERING MULTIPLE OPTICAL SIGNALS USING LIGHT TIGHTLY                                                                                                                                    |
| 82130174     | Granted     | 5930496       | 9/26/1997   | 7/27/1999  | 08/938361          | US | DOES NOT CARRY THE DATA<br>COMPUTER EXPANSION SLOT AND ASSOCIATED LOGIC FOR<br>AUTOMATICALLY DETECTING COMPATIBILITY WITH AN<br>EXPANSION CARD                                             |
| 82130486     | Granted     | 6012114       | 6/30/1997   | 1/4/2000   | 08/885063          | US | SYSTEM FOR PREVENTING SOFTWARE OF A COMPUTER<br>SYSTEM FROM INTERACTING WITH A CONNECTOR TO A<br>DATA CORRUPTION DUE TO SURPRISE REMOVAL OF A<br>CIRCUIT CARD                              |
| 82130927     | Granted     | 5987538       | 8/15/1997   | 11/16/1999 | 08/911608          | US | APPARATUS FOR INITIATING GENERATION OF AN INTER-<br>PROCESSOR INTERRUPT BY A PERIPHERAL DEVICE NOT<br>DIRECTLY CONNECTED TO ANY OF THE MULTI- PROCESSOR<br>LOCAL CONTROLLERS               |
| 82131608     | Granted     | 6466993       | 11/5/1998   | 10/15/2002 | 09/186540          | US | METHOD AND APPARATUS FOR PERFORMING<br>TRANSACTIONS RENDERING BETWEEN HOST PROCESSORS<br>AND I/O DEVICES USING CONCURRENT NON-BLOCKING<br>QUEUEING TECHNIQUES AND I/O BUS WRITE OPERATIONS |
| 82131983     | Granted     | 6230225       | 12/1/1998   | 5/8/2001   | 09/203083          | US | METHOD AND APPARATUS FOR MULTICASTING ON A BUS                                                                                                                                             |
| 82132985     | Granted     | 6266731       | 9/3/1998    | 7/24/2001  | 09/148042          | US | HIGH SPEED PERIPHERAL INTERCONNECT APPARATUS,<br>METHOD AND SYSTEM                                                                                                                         |
| 82199474     | Granted     | 7386750       | 7/15/2005   | 6/10/2008  | 11/182378          | US | Reduced Bus Turnaround Time In A Multiprocessor<br>Architecture                                                                                                                            |
| 82206839     | Granted     | 7783843       | 5/16/2005   | 8/24/2010  | 11/130536          | US | Bus Interface Adapted To Coalesce Snoop Responses                                                                                                                                          |
| 82220828     | Granted     | 6757748       | 7/20/2000   | 6/29/2004  | 09/620409          | US | MODULAR NETWORK INTERFACE SYSTEM AND METHOD                                                                                                                                                |
| 82241678     | Granted     | 9032128       | 4/28/2008   | 5/12/2015  | 12/988459          | US | Method And System For Generating And Delivering Inter-<br>Processor Interrupts In A Multi-Core Processor And In Certain<br>Shared-Memory Multi-Processor Systems                           |
| 83013644     | Application |               | 7/27/2012   |            | 13/560509          | US | INDICATING A SYNCHRONIZATION POINT BETWEEN A<br>TRANSMITTER AND A RECEIVER OF AN OPTICAL LINK                                                                                              |
| 83163737     | Published   |               | 9/14/2010   |            | 13/809452          | US | COMPUTER SYSTEM FABRIC SWITCH                                                                                                                                                              |
| 83543653     | Published   |               | 4/13/2011   |            | 14/009761          | US | INPUT/OUTPUT PROCESSING                                                                                                                                                                    |
| 83962444     | Allowed     |               | 1/6/2012    |            | 14/361185          | US | CONNECTOR MODULES TO<br>OPTICALLY CONNECT TO ELECTRONIC DEVICES                                                                                                                            |
| 83962467     | Published   |               | 1/6/2012    |            | 14/361221          | US | CONNECTOR MODULE HAVING A MOVEABLE OPTICAL<br>CONNECTOR                                                                                                                                    |
| 83983506     | Published   |               | 4/11/2012   |            | 14/368933          | US | OPTICAL PLENUM                                                                                                                                                                             |
| 83220860     | Published   |               | 10/26/2010  |            | 13/876574          | US | METHODS AND SYSTEMS FOR DETECTING SUSPECTED DATA<br>LEAKAGE USING TRAFFIC SAMPLES                                                                                                          |

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| 82066616     | Granted   | 6003092       | 2/7/1997    | 12/14/1999 | 08/930175          | US | SIGNAL TRANSMISSION BETWEEN NETWORKED COMPUTERS                                                                                      |
| 82068053     | Granted   | 6351466       | 5/1/1998    | 2/26/2002  | 09/071085          | US | Switching Systems And Methods Of Operation Of Switching Systems                                                                      |
| 82079603     | Granted   | 6910057       | 10/17/2001  | 6/21/2005  | 09/977985          | US | Truth Table Candidate Reduction For Cellular Automata Based Random Number Generators                                                 |
| 82135166     | Granted   | 6163870       | 11/6/1997   | 12/19/2000 | 08/965610          | US | MESSAGE ENCODING WITH IRREGULAR GRAPHING                                                                                             |
| 82182992     | Granted   | 7474793       | 9/2/2004    | 1/6/2009   | 10/933789          | US | Methods For Compression Using A Denoiser                                                                                             |
| 82263716     | Published |               | 10/29/2010  |            | 12/916383          | US | HEADLESS APPLIANCE                                                                                                                   |
| 82267088     | Granted   | 6011910       | 4/8/1997    | 36529      | 08/833663          | US | Supporting Authentication Across Multiple Network Access Servers                                                                     |
| 82267148     | Granted   | 6084873       | 3/18/1997   | 7/4/2000   | 08/819874          | US | Method for bypassing telephone network                                                                                               |
| 82267403     | Granted   | 6128715       | 9/2/1999    | 10/3/2000  | 08/866822          | US | Asynchronous Transmit Packet Buffer                                                                                                  |
| 82267838     | Granted   | 5991348       | 8/12/1997   | 11/23/1999 | 08/909860          | US | Method And Apparatus For Regenerating Symbol Timing From A Probing Signal In A System Having Non-Linear Network And Codec Distortion |
| 82268021     | Granted   | 6111920       | 11/26/1997  | 8/29/2000  | 08/980027          | US | METHOD AND SYSTEM FOR TIMING RECOVERY IN A BAUD-RATE SAMPLED DATA STREAM                                                             |
| 82268396     | Granted   | 6018767       | 2/24/1998   | 1/25/2000  | 09/028404          | US | Method And System For Managing Subscription Services With A Cable Modem                                                              |
| 82269020     | Granted   | 5974547       | 3/20/1998   | 10/26/1999 | 09/045577          | US | Technique For Reliable Network Booting Of An Operating System To A Client Computer                                                   |
| 82269086     | Granted   | 6052411       | 4/6/1998    | 4/18/2000  | 09/056166          | US | Idle Mode For Digital Subscriber Line                                                                                                |
| 82269398     | Granted   | 6538985       | 5/25/1999   | 3/25/2003  | 09/318533          | US | Channel Reservation Media Access Control Protocol Using Orthogonal Frequency Division Multiplexing                                   |
| 82269458     | Granted   | 6453024       | 2/25/1999   | 9/17/2002  | 09/257813          | US | Graphical Software For Reconfiguring Modems Having An Electrically Adaptable Telephone Line Interface                                |
| 82269647     | Granted   | 6256693       | 12/17/1999  | 7/3/2001   | 09/464262          | US | MASTER/SLAVE DATA BUS EMPLOYING UNIDIRECTIONAL ADDRESS AND DATA LINES AND REQUEST/ACKNOWLEDGE SIGNALING                              |
| 82270646     | Granted   | 6105151       | 10/1/1997   | 8/15/2000  | 08/942407          | US | System For Detecting Network Errors                                                                                                  |
| 82270649     | Granted   | 6134678       | 10/1/1997   | 10/17/2000 | 08/942573          | US | Method Of Detecting Network Errors                                                                                                   |
| 82271084     | Granted   | 6064673       | 7/1/1997    | 36662      | 08/886687          | US | Communications System Having Distributed Control and Real-Time Bandwidth Management                                                  |
| 82271210     | Granted   | 6937699       | 9/27/1999   | 38594      | 09/406320          | US | System And Method For Advertising Using Data Network Telephone Connections                                                           |
| 82271708     | Granted   | 6327625       | 11/30/1999  | 12/4/2001  | 09/451395          | US | FIFO-Based Network Interface Supporting Out-of-Order Processing                                                                      |

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| 82272203     | Granted     | 7092671       | 11/30/2000  | 8/15/2006  | 09/727727          | US | METHOD AND SYSTEM FOR WIRELESSLY AUTODIALING A TELEPHONE NUMBER FROM A RECORD STORED ON A PERSONAL INFORMATION DEVICE                                        |
| 82273208     | Granted     | 6854015       | 2/28/2001   | 2/8/2005   | 09/796398          | US | SYSTEM FOR ISOLATING ETHERNET NETWORK TRAFFIC                                                                                                                |
| 82273703     | Granted     | 7684383       | 1/30/2003   | 3/23/2010  | 10/356704          | US | Method and System for Dynamic Call Type Detection for Circuit and Packet Switched Networks                                                                   |
| 82274327     | Granted     | 7860089       | 7/16/2008   | 12/28/2010 | 12/174043          | US | METHOD AND SYSTEM FOR NETWORK BASED CALL-PICKUP                                                                                                              |
| 82274390     | Granted     | 7440442       | 10/21/2003  | 10/21/2008 | 10/690074          | US | Ip-based Enhanced Emergency Services Using Intelligent Client Devices                                                                                        |
| 82274453     | Granted     | 7613170       | 6/29/2004   | 11/3/2009  | 10/880686          | US | Method And Apparatus For Pstn-based IP Active Call Recovery And Re-routing                                                                                   |
| 82274456     | Granted     | 7990955       | 9/23/2009   | 40757      | 12/565017          | US | Method And Apparatus For Pstn-based IP Active Call Recovery And Re-routing                                                                                   |
| 82274825     | Granted     | 8218748       | 9/21/2006   | 7/10/2012  | 11/524763          | US | Telephone Call Chaining                                                                                                                                      |
| 82275263     | Granted     | 5832277       | 3/8/1996    | 11/3/1998  | 08/613084          | US | SYSTEM FOR ARBITRATING DEMAND ON MEMORY DURING CONFIGURATION OF A COMPUTER ADD-ON CARD                                                                       |
| 82275266     | Granted     | 6125179       | 12/13/1995  | 9/26/2000  | 08/571710          | US | ECHO CONTROL DEVICE WITH QUICK RESPONSE TO SUDDEN ECHO-PATH CHANGE                                                                                           |
| 82275389     | Granted     | 6055245       | 2/5/2000    | 4/25/2000  | 08/831459          | US | APPARATUS AND METHOD FOR DIGITALLY CONVEYING ALERT TONES BETWEEN AN ANALOG MODEM AND AN ISDN TERMINAL ADAPTER                                                |
| 82772059     | Granted     | 8509225       | 7/8/2011    | 8/13/2013  | 13/178911          | US | IP-Based Enhanced Emergency Services Using Intelligent Client Devices                                                                                        |
| 90016459     | Application |               | 1/24/2013   |            | 14/763107          | US | Address Resolution In Software-Defined Networks                                                                                                              |
| 82020977     | Granted     | 7085234       | 1/8/2002    | 8/1/2006   | 10/038579          | US | Method And Apparatus For Automatic Load-balancing On Multisegment Devices                                                                                    |
| 82025786     | Granted     | 6128729       | 12/16/1997  | 10/3/2000  | 08/991943          | US | Method And System For Automatic Configuration Of Network Links To Attached Devices                                                                           |
| 82026098     | Granted     | 7116678       | 4/30/2004   | 38993      | 10/837264          | US | High Speed Physical Layer For CSMA/CD Systems                                                                                                                |
| 82033346     | Granted     | 6079034       | 12/5/1997   | 36697      | 08/986077          | US | Hub-Embedded System For Automated Network Fault Detection And Isolation                                                                                      |
| 82035716     | Granted     | 6577600       | 1/11/1999   | 6/10/2003  | 09/228913          | US | Cost Calculation In Load Balancing Switch Protocols                                                                                                          |
| 82036898     | Granted     | 6269104       | 4/21/1998   | 7/31/2001  | 09/063723          | US | LINK CONTROL STATE MACHINE FOR CONTROLLING A MEDIA ACCESS CONTROLLER, A SERIAL PHYSICAL LAYER DEVICE AND A MEDIA INDEPENDENT INTERFACE PHYSICAL LAYER DEVICE |
| 82045142     | Granted     | 6460078       | 10/18/2000  | 10/1/2002  | 09/691726          | US | APPARATUS FOR AUTOMATICALLY CONFIGURING MEDIA CONNECTORS OF A NODE INTERFACE DEVICE                                                                          |

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| 82088033     | Granted     | 7366771       | 3/12/2002   | 39567      | 10/099372          | US | APPARATUS & METHOD FOR AUTOMATICALLY SWITCHING MEDIA CONNECTIONS WHEN OPERATING IN FORCED SPEED AND DUPLEX MODE |
| 82088036     | Granted     | 7340511       | 4/21/2004   | 3/4/2008   | 10/829522          | US | APPARATUS & METHOD FOR CONFIGURING NETWORK MEDIA CONNECTIONS                                                    |
| 82088279     | Granted     | 7305507       | 8/26/2005   | 12/4/2007  | 11/212146          | US | MULTI-STAGE ROUND ROBIN ARBITRATION SYSTEM                                                                      |
| 82128797     | Granted     | 6233246       | 12/30/1996  | 5/15/2001  | 08/774553          | US | NETWORK SWITCH WITH STATISTICS READ ACCESSES                                                                    |
| 82173626     | Granted     | 7370346       | 4/29/2003   | 39574      | 10/425436          | US | Method And Apparatus For Access Security Services                                                               |
| 82173629     | Granted     | 8826385       | 4/15/2008   | 9/2/2014   | 12/082835          | US | Method And Apparatus For Access Security Services                                                               |
| 82179806     | Granted     | 7623452       | 8/1/2003    | 40141      | 10/633440          | US | User Configurable Functions For Adjusting Service Differentiation Meters                                        |
| 82183307     | Granted     | 7474653       | 12/5/2003   | 1/6/2009   | 10/729518          | US | Decision Cache Using Multi-key Lookup                                                                           |
| 82186547     | Granted     | 7760622       | 4/28/2008   | 7/20/2010  | 12/150369          | US | Redundant Router Set Up                                                                                         |
| 82186550     | Granted     | 8195781       | 8/19/2004   | 6/5/2012   | 10/923235          | US | Network Management With Scalable Trap Definitions                                                               |
| 82205093     | Granted     | 8243595       | 8/5/2005    | 41135      | 11/198056          | US | Prioritization Of Network Traffic Sent To A Processor By Using Packet Importance                                |
| 82205528     | Granted     | 7467247       | 10/31/2005  | 39798      | 11/261663          | US | Timeouts On Accessing A Shared Resource                                                                         |
| 82206029     | Granted     | 8612647       | 4/12/2005   | 41625      | 11/103966          | US | Priority Aware Queue                                                                                            |
| 82210523     | Granted     | 7636315       | 6/21/2005   | 40169      | 11/157683          | US | Broadcast Traceroute                                                                                            |
| 82214267     | Granted     | 7941727       | 10/31/2006  | 40673      | 11/591034          | US | CHECKSUM GENERATOR FOR VARIABLE-LENGTH DATA                                                                     |
| 82214648     | Granted     | 8054847       | 10/31/2006  | 40855      | 11/591167          | US | Buffer Management In A Network Device                                                                           |
| 82216079     | Allowed     |               | 10/30/2006  |            | 11/590208          | US | Method And System For Filling Cache Memory For Cache Memory Initialization                                      |
| 82218017     | Granted     | 7697519       | 10/31/2006  | 4/13/2010  | 11/590714          | US | Packet Processing                                                                                               |
| 82225754     | Granted     | 7808898       | 7/8/2008    | 10/5/2010  | 12/168898          | US | Flow Estimator                                                                                                  |
| 82229132     | Published   |               | 3/7/2007    |            | 11/714937          | US | CONFIGURABLE NETWORK DEVICE USER INTERFACE                                                                      |
| 82229507     | Granted     | 8391288       | 1/31/2007   | 3/5/2013   | 11/669815          | US | Security System For Protecting Networks From Vulnerability Exploits                                             |
| 82230062     | Granted     | 7594047       | 7/9/2007    | 9/22/2009  | 11/825739          | US | Buffer Circuit                                                                                                  |
| 82231250     | Granted     | 8571048       | 4/30/2007   | 10/29/2013 | 11/742573          | US | Dynamic Memory Queue Depth Algorithm                                                                            |
| 82231253     | Granted     | 8340091       | 7/11/2007   | 12/25/2012 | 11/827295          | US | Packet Processing                                                                                               |
| 82231940     | Granted     | 8549239       | 6/20/2007   | 10/1/2013  | 11/820806          | US | Network Message Logging And Archival                                                                            |
| 82239617     | Granted     | 7965636       | 12/5/2008   | 6/21/2011  | 12/315780          | US | Loadbalancing Network Traffic Across Multiple Remote Inspection Devices                                         |
| 82240553     | Granted     | 8099637       | 10/30/2007  | 1/17/2012  | 11/928678          | US | Software Fault Detection Using Progress Tracker                                                                 |
| 82244672     | Application |               | 2/18/2009   |            | 12/388159          | US | Sending A Test Signal To Illuminate Indicators At First And Second Network Equipment                            |
| 82246295     | Granted     | 9160688       | 6/30/2009   | 10/13/2015 | 12/494993          | US | System And Method For Selective Direct Memory Access                                                            |
| 82247543     | Granted     | 8214680       | 2/12/2009   | 7/3/2012   | 12/370209          | US | POE POWERED MANAGEMENT CIRCUITRY USING OUT-OF-BAND DATA PORT                                                    |

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| 82249730     | Granted   | 8320120       | 12/19/2008  | 11/27/2012 | 12/340314          | US | Reversible Air Flow Fan System                                                                                         |
| 82251293     | Granted   | 7257107       | 7/8/2004    | 39308      | 10/887321          | US | DEVICE AND METHOD FOR DETECTING UNAUTHORIZED "ROGUE" WIRELESS LAN ACCESS POINTS                                        |
| 82259720     | Granted   | 8264969       | 10/30/2009  | 41163      | 12/609070          | US | COMMUNICATIONS LINK HEALTH MONITORING                                                                                  |
| 82262276     | Published |               | 2/17/2010   |            | 12/707046          | US | VIRTUAL INSERTION INTO A NETWORK                                                                                       |
| 82264589     | Granted   | 8614890       | 4/18/2011   | 41632      | 13/088526          | US | Chassis Extension Module                                                                                               |
| 82266713     | Granted   | 6163545       | 1/15/1998   | 36879      | 09/007802          | US | System And Method For Data Transfer Across Multiple Domains                                                            |
| 82266773     | Granted   | 5828329       | 12/5/1996   | 36095      | 08/760504          | US | Adjustable Temperature Coefficient Current Reference                                                                   |
| 82267646     | Granted   | 5926463       | 10/6/1997   | 36361      | 08/943769          | US | METHOD AND APPARATUS FOR VIEWING AND MANAGING A CONFIGURATION OF A COMPUTER NETWORK                                    |
| 82267709     | Granted   | 5970089       | 8/12/1997   | 10/19/1999 | 08/909997          | US | METHOD AND APPARATUS FOR GENERATING A PROBING SIGNAL FOR A SYSTEM HAVING NON-LINEAR NETWORK AND CODEC DISTORTION       |
| 82267715     | Granted   | 6256353       | 10/19/1999  | 7/3/2001   | 09/421955          | US | METHOD AND APPARATUS FOR GENERATING A PROBING SIGNAL FOR A SYSTEM HAVING NON-LINEAR NETWORK AND CODEC DISTORTION       |
| 82267775     | Granted   | 6075774       | 11/18/1997  | 6/13/2000  | 08/972284          | US | Method and Device for Generating A Frame Check Sequence                                                                |
| 82267901     | Granted   | 6275498       | 3/19/1998   | 8/14/2001  | 09/044403          | US | Extended PHY Addressing                                                                                                |
| 82268213     | Granted   | 5978378       | 9/11/1997   | 11/2/1999  | 08/927641          | US | Method And Apparatus For VLAN Support                                                                                  |
| 82268273     | Granted   | 6052803       | 9/26/1997   | 36634      | 08/938572          | US | KEY-BASED TECHNIQUE FOR ASSURING AND MAINTAINING INTEGRITY OF FIRMWARE STORED IN BOTH VOLATILE AND NON-VOLATILE MEMORY |
| 82268333     | Granted   | 6195351       | 1/28/1998   | 2/27/2001  | 09/014548          | US | Logical Switch Set                                                                                                     |
| 82268645     | Granted   | 6185520       | 5/22/1998   | 2/6/2001   | 09/083909          | US | Method And System For Bus Switching Data Transfers                                                                     |
| 82268774     | Granted   | 6222820       | 5/28/1998   | 4/24/2001  | 09/086040          | US | METHOD OF VCC/VPC REDUNDANCY FOR ASYNCHRONOUS TRANSFER MODE NETWORKS                                                   |
| 82268897     | Granted   | 6327620       | 8/10/1998   | 12/4/2001  | 09/131725          | US | Methods and apparatus for collecting, storing, processing and using Network Traffic Data                               |
| 82269023     | Granted   | 6438695       | 10/30/1998  | 8/20/2002  | 09/183449          | US | Secure Wiretap Support For Internet Protocol Security                                                                  |
| 82269206     | Granted   | 7023863       | 8/19/2004   | 4/4/2006   | 10/922647          | US | APPARATUS AND METHOD FOR PROCESSING ENCRYPTED PACKETS IN A COMPUTER NETWORK DEVICE                                     |
| 82269332     | Granted   | 6066001       | 11/30/1998  | 5/23/2000  | 09/200883          | US | Coupler For Minimizing EMI Emissions                                                                                   |
| 82269338     | Granted   | 6137689       | 5/28/1998   | 10/24/2000 | 09/086505          | US | Protective Enclosure Apparatus And Method                                                                              |
| 82269461     | Granted   | 6782066       | 1/14/1999   | 8/24/2004  | 09/231034          | US | METHOD AND SYSTEM FOR DETECTING FRAME SLIPS IN A DIGITAL COMMUNICATIONS CHANNEL                                        |
| 82269707     | Granted   | 6975627       | 10/13/1999  | 12/13/2005 | 09/417102          | US | Modification Of Tag Fields In Ethernet Data Packets                                                                    |
| 82269770     | Granted   | 6324575       | 1/29/1999   | 11/27/2001 | 09/240360          | US | Intelligent Selection Of Multicast Filtering Modes For Switch Ports                                                    |

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| 82269773     | Granted | 6310882       | 1/27/1999   | 10/30/2001 | 09/238880          | US | HIGH SPEED SWITCH ARCHITECTURE USING SEPARATE TRANSMIT AND RECEIVE CHANNELS WITH INDEPENDENT FORWARDING TABLES                       |
| 82269899     | Granted | 6217350       | 2/1/1999    | 4/17/2001  | 09/241341          | US | Media Jack Adaptor and System                                                                                                        |
| 82270082     | Granted | 6257906       | 2/8/1999    | 7/10/2001  | 09/246534          | US | FUNCTIONALLY ILLUMINATED ELECTRONIC CONNECTOR WITH IMPROVED LIGHT DISPERSION                                                         |
| 82270085     | Granted | 6152779       | 11/30/1998  | 11/28/2000 | 09/201322          | US | Connector Shield                                                                                                                     |
| 82270145     | Granted | 6457055       | 5/12/1999   | 9/24/2002  | 09/310469          | US | CONFIGURING ETHERNET DEVICES                                                                                                         |
| 82270331     | Granted | 6986157       | 12/21/1998  | 1/10/2006  | 09/217347          | US | Method and System for Dynamic Service Registration in a Data-Over-Cable System                                                       |
| 82270892     | Granted | 6704284       | 1/7/2000    | 3/9/2004   | 09/479501          | US | Management System And Method For Monitoring Stress In A Network                                                                      |
| 82270955     | Granted | 6496867       | 8/27/1999   | 12/17/2002 | 09/384120          | US | A SYSTEM AND METHOD TO NEGOTIATE PRIVATE NETWORK ADDRESSES FOR INITIATING TUNNELING ASSOCIATIONS THROUGH PRIVATE AND PUBLIC NETWORKS |
| 82271018     | Granted | 7603408       | 7/24/2002   | 10/13/2009 | 10/019988          | US | Method And System For Network Management                                                                                             |
| 82271081     | Granted | 6047032       | 11/7/1997   | 4/4/2000   | 08/965835          | US | Signal Equalization And Data Recovery With Non-Linear Digital Threshold Feedback                                                     |
| 82271270     | Granted | 6826613       | 3/15/2000   | 11/30/2004 | 09/525966          | US | VIRTUALLY ADDRESSING STORAGE DEVICES THROUGH A SWITCH                                                                                |
| 82271459     | Granted | 6173848       | 10/8/1999   | 1/16/2001  | 09/415571          | US | Mounting Shelf For Installation Of Lan Hubs                                                                                          |
| 82271648     | Granted | 7107326       | 11/27/2000  | 9/12/2006  | 09/722939          | US | Method and System for Integrating IP Address Reservations with Policy Provisioning                                                   |
| 82271705     | Granted | 6535983       | 11/8/1999   | 3/18/2003  | 09/435722          | US | SYSTEM AND METHOD FOR SIGNALING AND DETECTING AN END DEVICE POWERED BY HUB/SWITCH/CONCENTRATOR OVER ETHERNET                         |
| 82272083     | Granted | 6775301       | 3/8/2000    | 8/10/2004  | 09/520931          | US | System and Method For Compensating For Channel Jitter                                                                                |
| 82272332     | Granted | 7233601       | 9/14/2000   | 6/19/2007  | 09/662158          | US | Cascade Architecture and Operation for Packet-Based Communication Systems                                                            |
| 82272392     | Granted | 6662332       | 11/1/2000   | 12/9/2003  | 09/704076          | US | INTERLEAVER FOR BURST ERROR CORRECTION                                                                                               |
| 82272455     | Granted | 6766377       | 8/24/2000   | 38188      | 09/645247          | US | Media Gateway Proxy                                                                                                                  |
| 82272458     | Granted | 7634577       | 4/19/2004   | 12/15/2009 | 10/827009          | US | Media Gateway Proxy                                                                                                                  |
| 82273394     | Granted | 7065670       | 10/31/2002  | 6/20/2006  | 10/284475          | US | SERVER MONITORING AND FAILOVER MECHANISM                                                                                             |
| 82273958     | Granted | 7624434       | 3/1/2002    | 11/24/2009 | 10/090543          | US | SYSTEM FOR PROVIDING FIREWALL CAPABILITIES TO A COMMUNICATION DEVICE                                                                 |
| 82274267     | Granted | 7420968       | 6/6/2003    | 9/2/2008   | 10/456702          | US | High-Speed Switch Architecture                                                                                                       |
| 82274519     | Granted | 7480299       | 2/22/2005   | 1/20/2009  | 11/064227          | US | Rules Engine for Access Control Lists in Network Units                                                                               |
| 82274579     | Granted | 7584299       | 7/29/2005   | 9/1/2009   | 11/192771          | US | CONFIGURATION OF VPNS                                                                                                                |



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| 822/74828    | Granted     | 6058262       | 4/18/1997   | 5/2/2000   | 08/844080          | US | COMPUTER-AIDED-DESIGN METHOD AND APPARATUS FOR NETWORKS                                          |
| 822/5326     | Granted     | 5883809       | 7/26/1996   | 3/16/1999  | 08/688818          | US | Behavioral Language Models For Testing And Verification Of Digital Electronic Circuits           |
| 822/5392     | Granted     | 6075860       | 2/19/1997   | 6/13/2000  | 08/802070          | US | Apparatus And Method For Authentication And Encryption Of A Remote Terminal Over A Wireless Link |
| 82690041     | Published   |               | 3/26/2012   |            | 13/430265          | US | PACKET DESCRIPTOR TRACE INDICATORS                                                               |
| 82750038     | Granted     | 8332554       | 6/29/2011   | 12/11/2012 | 13/172298          | US | Method and Apparatus For Real-Time Transport of Multimedia Information In A Network              |
| 82828117     | Published   |               | 1/27/2012   |            | 13/360284          | US | PROPER INSTALLATION DETERMINATION BASED ON ARBITRARY PATTERN IDENTIFICATION                      |
| 82829643     | Published   |               | 11/14/2011  |            | 13/295599          | US | Network Device Heating Based on Power Classification and Temperature                             |
| 82859713     | Granted     | 9008099       | 11/23/2011  | 4/14/2015  | 13/304036          | US | METHOD AND SYSTEM FOR SLIDING WINDOW PROCESSING OF A DATAGRAM                                    |
| 82859796     | Granted     | 8879563       | 2/10/2012   | 11/4/2014  | 13/370357          | US | CONTENT-BASED FORWARDING OF NETWORK TRAFFIC                                                      |
| 82894961     | Published   |               | 11/23/2011  |            | 13/304104          | US | Open Network Connection                                                                          |
| 82914675     | Granted     | 8266303       | 1/9/2012    | 9/11/2012  | 13/346033          | US | MANAGING NETWORK CONNECTIONS (as amended)                                                        |
| 82942409     | Granted     | 8541961       | 2/14/2012   | 9/24/2013  | 13/396384          | US | Electron Beam Switch                                                                             |
| 82990089     | Granted     | 8804707       | 4/9/2012    | 8/12/2014  | 13/442591          | US | Switching Fabrics and Control Protocols for them                                                 |
| 83008240     | Granted     | 8762722       | 5/29/2012   | 6/24/2014  | 13/482295          | US | Secure Information Distribution Between Nodes (network Devices)                                  |
| 83010584     | Allowed     |               | 5/17/2013   |            | 13/896378          | US | BLOOM FILTER WITH MEMORY ELEMENT                                                                 |
| 83096910     | Allowed     |               | 9/26/2012   |            | 13/627578          | US | Sensing Current To Protect A Fuse                                                                |
| 83139638     | Published   |               | 6/13/2013   |            | 13/917369          | US | COUNTER POLICY IMPLEMENTATION                                                                    |
| 83154786     | Published   |               | 3/27/2013   |            | 13/851345          | US | ADAPTER TO PROVIDE POWER FROM A POWER SUPPLY                                                     |
| 83198072     | Published   |               | 3/15/2013   |            | 13/832330          | US | DEVICE LOCAL REPUTATION SCORE CACHE                                                              |
| 83198713     | Allowed     |               | 3/14/2013   |            | 13/804062          | US | RATE REDUCTION FOR AN APPLICATION CONTROLLER                                                     |
| 83213721     | Granted     | 8964931       | 3/15/2013   | 42059      | 13/835529          | US | FREQUENCY SCALING COUNTER                                                                        |
| 83261186     | Published   |               | 5/13/2013   |            | 13/893007          | US | Proactive Containment Of Network Security Attacks                                                |
| 83425388     | Published   |               | 2/10/2011   |            | 13/978784          | US | SYSTEMS, METHODS, AND APPARATUS TO AUTHENTICATE COMMUNICATIONS MODULES                           |
| 83793442     | Published   |               | 9/28/2011   |            | 14/238573          | US | MANAGING A SWITCH FABRIC                                                                         |
| 83957804     | Published   |               | 5/20/2014   |            | 14/282859          | US | METHODS FOR PACKET FORWARDING THROUGH A COMMUNICATION LINK OF A DISTRIBUTED LINK                 |
| 84060898     | Application |               | 10/2/2014   |            | 14/504700          | US | AGGREGATION GROUP USING MESH TAGGING                                                             |
| 84077612     | Published   |               | 7/31/2012   |            | 14/391834          | US | FIBER CHANNEL 1:N REDUNDANCY                                                                     |
|              |             |               |             |            |                    |    | MANAGING AN INTERFACE BETWEEN AN APPLICATION AND A NETWORK                                       |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------------------------------|
| 84088366     | Allowed     |               | 12/15/2014  |            | 14/570083          | US | A Communication Device Ingress Information Management System And Method                                          |
| 90017166     | Application |               | 7/24/2015   |            | 14/763484          | US | NETWORK CONTROLLER PROVISIONED MACSEC KEYS                                                                       |
| 90056854     | Application |               | 3/15/2013   |            | 14/777489          | US | TRAFFIC CONTROL ACROSS A LAYER 2 - LAYER 3 BOUNDARY IN A SOFTWARE DEFINED NETWORK                                |
| 90057020     | Application |               | 6/14/2013   |            | 14/777423          | US | DATA LOOP DETECTION                                                                                              |
| 82089095     | Published   |               | 5/22/2007   |            | 11/805041          | US | Wireless Network Control And Protection System                                                                   |
| 82238804     | Granted     | 878637        | 9/1/2008    | 7/22/2014  | 12/202350          | US | Systems And Methods For Downloading Boot Code Associated With Base Stations                                      |
| 82263656     | Granted     | 8331303       | 10/1/2010   | 12/11/2012 | 12/896397          | US | Adaptive Wireless Network                                                                                        |
| 82265777     | Granted     | 6005519       | 9/4/1996    | 36515      | 08/707558          | US | Tunable Microstrip Antenna And Method For Tuning Same                                                            |
| 82269401     | Granted     | 6697354       | 8/19/1998   | 2/24/2004  | 09/136484          | US | Method and System for Distributed Network Address Translation for Mobile Network Devices                         |
| 82272266     | Granted     | 6933896       | 4/7/2003    | 8/23/2005  | 10/408394          | US | Extendable Planar Diversity Antenna                                                                              |
| 82272893     | Granted     | 6366261       | 9/8/2000    | 4/2/2002   | 09/657385          | US | Method and Apparatus for overmolded antenna                                                                      |
| 82272953     | Granted     | 7110393       | 2/28/2001   | 9/19/2006  | 09/795587          | US | System and Method for Providing User Mobility Handling in a Network Telephony System                             |
| 82273640     | Granted     | 6760804       | 9/11/2001   | 7/6/2004   | 09/954113          | US | Apparatus and method for providing an interface between legacy applications and a wireless communication network |
| 82273646     | Granted     | 7325048       | 7/3/2002    | 1/29/2008  | 10/189210          | US | METHOD FOR AUTOMATICALLY CREATING A MODEM INTERFACE FOR USE WITH A WIRELESS DEVICE                               |
| 82274015     | Granted     | 7280621       | 3/31/2003   | 10/9/2007  | 10/403553          | US | Preamble Detector Method and Device for OFDM Systems                                                             |
| 82274018     | Granted     | 7203245       | 3/31/2003   | 4/10/2007  | 10/403552          | US | Symbol Boundary Detector Method and Device for OFDM Systems                                                      |
| 82274078     | Granted     | 7548579       | 3/31/2003   | 6/16/2009  | 10/403546          | US | Symbol Spreading Method and Device for OFDM Systems                                                              |
| 82274204     | Granted     | 7257088       | 5/11/2004   | 8/14/2007  | 10/843218          | US | SDMA System Using MU-SIMO for the Uplink and MU-MISO for the Downlink                                            |
| 82607445     | Allowed     |               | 3/22/2011   |            | 13/069072          | US | LOCATION-BASED ASSOCIATION FOR COMMUNICATIONS NETWORKS                                                           |
| 82683589     | Granted     | 8730811       | 4/7/2011    | 5/20/2014  | 13/081766          | US | Managing Network Traffic                                                                                         |
| 82749122     | Granted     | 8625462       | 9/30/2011   | 1/7/2014   | 13/250500          | US | OWNERSHIP REQUESTS FOR ACCESS POINTS                                                                             |
| 83037394     | Published   |               | 7/25/2012   |            | 13/557287          | US | COVER HAVING AN ANTENNA RADIATING ELEMENT FOR A WIRELESS ACCESS POINT                                            |
| 83140302     | Published   |               | 1/30/2013   |            | 13/754585          | US | PERFORMING DATA OPERATIONS WHILE PRESERVING GRAPHICAL USER INTERFACE REAL-ESTATE                                 |
| 84076381     | Published   |               | 6/29/2012   |            | 14/391224          | US | Routing Packet From Edge Device To Home Network Or From Home Network To Remote Access Network                    |
| 84298599     | Application |               | 7/10/2015   |            | 14/796476          | US | MANAGING MULTIPLE VIRTUAL NETWORK MEMBERSHIPS                                                                    |
| 82233002     | Granted     | 8150851       | 10/27/2008  | 4/3/2012   | 12/258638          | US | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                          |

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| 82246922     | Granted   | 8117343       | 10/28/2008  | 2/14/2012  | 12/260024 US       |    | Landmark Chunking Of Landmarkless Regions                                                                                                                     |
| 82264781     | Published |               | 10/17/2010  |            | 12/906108 US       |    | Storage Tiers for Different Backup Types                                                                                                                      |
| 82615975     | Granted   | 8438137       | 2/28/2011   | 5/7/2013   | 13/037309 US       |    | AUTOMATIC SELECTION OF SOURCE OR TARGET DEDUPPLICATION                                                                                                        |
| 82689211     | Granted   | 8589648       | 7/7/2011    | 11/19/2013 | 13/177693 US       |    | PERFORMING A COPY OPERATION ON A REPLICATED VIRTUAL MACHINE                                                                                                   |
| 82852966     | Granted   | 8612705       | 7/29/2009   | 12/17/2013 | 13/260104 US       |    | MAKING A PHYSICAL COPY OF DATA AT A REMOTE STORAGE DEVICE                                                                                                     |
| 83731367     | Published |               | 6/14/2011   |            | 14/117761 US       |    | DEDUPPLICATION IN DISTRIBUTED FILE SYSTEMS                                                                                                                    |
| 83952434     | Published |               | 5/1/2012    |            | 14/395492 US       |    | SEGMENT COMBINING FOR DEDUPPLICATION                                                                                                                          |
| 84210238     | Published |               | 3/26/2015   |            | 14/670041 US       |    | Load Balancing Data Access In Virtualized Storage Nodes                                                                                                       |
| 81968348     | Granted   | 6700729       | 10/17/2000  | 3/2/2004   | 09/691646 US       |    | Alignment Marks For Tape Head Positioning                                                                                                                     |
| 81972284     | Granted   | 6966522       | 3/25/2004   | 11/22/2005 | 10/809013 US       |    | Irregular Surfaced Tape Guide                                                                                                                                 |
| 81978968     | Granted   | 7440360       | 8/13/2003   | 10/21/2008 | 10/640708 US       |    | Apparatus And Method For Retrieving Data Related To A Data Cartridge In A Media Storage System                                                                |
| 81995387     | Granted   | 6897432       | 3/20/2001   | 5/24/2005  | 09/813205 US       |    | Imaging apparatus having discontinuous lens reference surfaces and method of assembling the imaging apparatus                                                 |
| 82000130     | Granted   | 6866405       | 2/6/2003    | 3/15/2005  | 10/359756 US       |    | Variable Intensity Illuminator Lens                                                                                                                           |
| 82028663     | Granted   | 6775093       | 5/9/1997    | 8/10/2004  | 08/853608 US       |    | Data Cartridge-To-Caddy Referencing System For A Data Cartridge Handling Mechanism Within An Autochanger                                                      |
| 82030031     | Granted   | 6018444       | 10/28/1997  | 1/25/2000  | 08/959509 US       |    | BATCH FABRICATED SERVO WRITE HEAD HAVING LOW WRITE-GAP LINE WIDTH VARIATION                                                                                   |
| 82034651     | Granted   | 5930089       | 3/13/1998   | 7/27/1999  | 09/042323 US       |    | Head Cleaner For Linear Tape Drive                                                                                                                            |
| 82043021     | Granted   | 6003802       | 4/3/1998    | 12/21/1999 | 09/055016 US       |    | Tape Leader Pin Assembly And Method For Making The Same                                                                                                       |
| 82047140     | Granted   | 6751058       | 1/24/2003   | 6/15/2004  | 10/350430 US       |    | Positioning System For Removable Data Storage Cartridges                                                                                                      |
| 82047512     | Granted   | 6158899       | 1/27/1999   | 12/12/2000 | 09/238687 US       |    | Method And Apparatus For Alleviating ESD Induced EMI Radiating From I/O Connector Apertures                                                                   |
| 82048451     | Granted   | 6215618       | 4/1/1999    | 4/10/2001  | 09/285804 US       |    | Linear Tape Drive Head Cleaning Process                                                                                                                       |
| 82064123     | Granted   | 6833970       | 7/31/2001   | 12/21/2004 | 09/917786 US       |    | DATA STORAGE                                                                                                                                                  |
| 82064183     | Granted   | 6958873       | 7/31/2001   | 10/25/2005 | 09/917853 US       |    | Data Rewrite Control In Data Transfer And Storage Apparatus                                                                                                   |
| 82064186     | Granted   | 6792568       | 7/31/2001   | 9/14/2004  | 09/917865 US       |    | DATA TRANSFER AND STORAGE DEVICE AND METHOD                                                                                                                   |
| 82065557     | Granted   | 7363425       | 12/28/2001  | 4/22/2008  | 10/034518 US       |    | System And Method For Securing Drive Access To Media Based On Medium Identification Numbers                                                                   |
| 82067243     | Granted   | 6058494       | 7/3/1997    | 5/2/2000   | 08/887917 US       |    | STORAGE SYSTEM WITH PROCEDURE FOR MONITORING LOW LEVEL STATUS CODES, DELIVERING HIGH LEVEL STATUS CODES BASED THEREON AND TAKING APPROPRIATE REMEDIAL ACTIONS |

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| 82067741     | Granted     | 7075874       | 7/17/2001   | 7/11/2006  | 09/905984          | US | DATA STORAGE DEVICE MONITORING SYSTEM, METHOD OF AND REMOVABLE DATA CARRIER USE WITH DATA STORAGE SYSTEMS                                |
| 82068113     | Granted     | 6631485       | 1/16/1998   | 10/7/2003  | 09/600306          | US | Methods And Apparatus For Data Storage On Magnetic Media Including Error Correction Codes                                                |
| 82255598     | Granted     | 7263686       | 4/4/2003    | 8/28/2007  | 10/407849          | US | SYSTEM AND METHOD FOR AUTOMATED CODE GENERATION USING LANGUAGE NEUTRAL SOFTWARE CODE                                                     |
| 82256849     | Granted     | 7408440       | 10/25/2004  | 8/5/2008   | 10/972975          | US | System And Method For Analyzing Message Information From Diverse Network Devices                                                         |
| 82256852     | Granted     | 7408441       | 10/25/2004  | 8/5/2008   | 10/973084          | US | SYSTEM AND METHOD FOR ANALYZING USER-GENERATED EVENT INFORMATION AND MESSAGE INFORMATION FROM NETWORK DEVICES                            |
| 82257158     | Granted     | 7937690       | 5/23/2006   | 5/3/2011   | 11/439457          | US | EVALUATING PERFORMANCE OF SOFTWARE APPLICATION SYSTEMS AND PROCESSES FOR DETERMINING COSTS ASSOCIATED WITH INTERNAL SOFTWARE DEVELOPMENT |
| 82257287     | Granted     | 7761492       | 3/30/2007   | 40379      | 11/694833          | US | SYSTEMS AND PROCESSES FOR EVALUATING WEBPAGES                                                                                            |
| 82257407     | Granted     | 7831596       | 7/2/2007    | 11/9/2010  | 11/772705          | US | MANAGING DEPLOYMENT OF ACTIVE OBJECTS TO COMPUTER SYSTEMS                                                                                |
| 82257659     | Published   |               | 8/15/2008   |            | 12/192637          | US | SYSTEM AND METHOD FOR PROCESSING DATA PRODUCT INTELLIGENCE ENGINE                                                                        |
| 82262339     | Published   |               | 4/9/2010    |            | 12/757112          | US | Method An Apparatus For Compressing And/or Decompressing A Data Structure                                                                |
| 84226554     | Application |               | 4/22/2015   |            | 14/437660          | US | APPARATUS, AND ASSOCIATED METHOD, FOR DISPLAYING DATA USING DATA PAINTING OF AN ASYMMETRICAL FACIAL IMAGE                                |
| 82210586     | Granted     | 8234257       | 7/5/2006    | 7/31/2012  | 11/480483          | US | Generating A Resource Allocation Action Plan                                                                                             |
| 82254098     | Granted     | 8064724       | 10/25/2007  | 40869      | 11/924237          | US | APPARATUS, AND ASSOCIATED METHOD, FOR GENERATING AN INFORMATION TECHNOLOGY INCIDENT REPORT                                               |
| 82255601     | Granted     | 8311865       | 2/14/2003   | 11/13/2012 | 10/368282          | US | Access Control In A Web Application Using Event Filtering                                                                                |
| 82257347     | Granted     | 9043014       | 8/23/2007   | 5/26/2015  | 11/844224          | US | SYSTEM, METHOD AND APPARATUS FOR DECRYPTING DATA STORED ON REMOVABLE MEDIA                                                               |
| 82187423     | Granted     | 7735119       | 5/6/2005    | 6/8/2010   | 11/124549          | US | System and Method for Selectively Defining Access to Application Features                                                                |
| 82215581     | Granted     | 7970142       | 8/5/2005    | 6/28/2011  | 11/996747          | US | Network User Authentication System And Method                                                                                            |
| 82251917     | Granted     | 6430549       | 7/17/1998   | 37474      | 09/118621          | US | APPARATUS, AND ASSOCIATED METHOD, FOR DETECTING FRAUDULENT TEXT MESSAGE                                                                  |
| 82255540     | Granted     | 7100197       | 12/10/2001  | 38958      | 10/013609          | US | Non-invasive Method And System For Automated Administration Of Diverse Security Constrained Servers                                      |
| 82253726     | Granted     | 8150679       | 8/15/2008   | 41002      | 12/192913          | US |                                                                                                                                          |
| 82253792     | Granted     | 8849960       | 2/11/2005   | 41912      | 11/057103          | US |                                                                                                                                          |

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| 82256660     | Granted     | 7509676       | 7/30/2004   | 39896      | 10/909258          | US | SYSTEM AND METHOD FOR RESTRICTING ACCESS TO AN ENTERPRISE NETWORK                                         |
| 83099432     | Granted     | 9075704       | 1/25/2013   | 42192      | 13/750333          | US | MITIGATING RISKS DURING A HIGH AVAILABILITY AND DISASTER RECOVERY (HA/DR) REHEARSAL                       |
| 8320461      | Published   |               | 3/18/2013   |            | 13/846083          | US | Securing Confidential Information In A Document                                                           |
| 83814335     | Published   |               | 10/28/2011  |            | 14/239407          | US | METHOD AND SYSTEM FOR SINGLE POINT OF FAILURE ANALYSIS AND REMEDIATION                                    |
| 81988391     | Granted     | 6549418       | 9/26/2001   | 37726      | 09/965281          | US | Land Grid Array Integrated Circuit Device Module                                                          |
| 81988394     | Granted     | 6477058       | 6/28/2001   | 37565      | 09/894923          | US | Integrated Circuit Device Package Including Multiple Stacked Components                                   |
| 83138742     | Published   |               | 1/28/2013   |            | 13/751353          | US | UNIT UNDER TEST AUTOMATION                                                                                |
| 83140594     | Published   |               | 4/30/2013   |            | 13/874090          | US | USING CUSTOMER COMPUTING SYSTEM TO TEST OTHER CUSTOMER COMPUTING SYSTEMS                                  |
| 83150126     | Published   |               | 2/20/2013   |            | 13/771293          | US | PROTECTING MEMORY DIAGNOSTICS FROM INTERFERENCE                                                           |
| 83778059     | Published   |               | 7/29/2011   |            | 14/232003          | US | TRANSMITTING A DIAGNOSTIC CODE FROM A PROCESSOR                                                           |
| 82091156     | Granted     | 7818530       | 11/26/2003  | 40470      | 10/723950          | US | Data Management Systems, Articles Of Manufacture, And Data Storage Methods                                |
| 82169570     | Granted     | 8650372       | 10/10/2003  | 41681      | 10/684001          | US | Methods And Systems For Calculating Required Scratch Media                                                |
| 82224881     | Application |               | 11/5/2004   |            | 10/982184          | US | Single Repository Manifestation Of A Multi-repository System                                              |
| 82585284     | Published   |               | 4/29/2011   |            | 13/098048          | US | DATABASE ARCHIVING MODEL ERROR DETECTION AND CORRECTION SYSTEM                                            |
| 82641262     | Granted     | 8386494       | 8/7/2008    | 2/26/2013  | 13/057930          | US | Providing Data Structures For Determining Whether Keys Of An Index Are Present In A Storage System        |
| 82870596     | Published   |               | 3/7/2012    |            | 13/414175          | US | IMPLEMENTING A SCALABLE TEST ENVIRONMENT                                                                  |
| 82110506     | Granted     | 6263345       | 9/28/1998   | 7/17/2001  | 09/162245          | US | HISTOGRAM SYNTHESIS MODELER FOR A DATABASE QUERY OPTIMIZER                                                |
| 82243424     | Granted     | 8666966       | 1/30/2009   | 3/4/2014   | 12/362702          | US | Providing Parallel Result Streams For Database Queries                                                    |
| 82251164     | Published   |               | 8/26/2009   |            | 12/548198          | US | Distributed Data Analysis                                                                                 |
| 82260533     | Published   |               | 1/5/2010    |            | 12/652424          | US | ALLOCATING RESOURCES IN A DATA WAREHOUSE                                                                  |
| 82756427     | Published   |               | 10/13/2011  |            | 13/272598          | US | Parameters Expressions for Modeling User Defined Function Execution in Analytical Data Processing Systems |
| 82924247     | Granted     | 8812484       | 3/30/2010   | 8/19/2014  | 13/383775          | US | SYSTEM AND METHOD FOR OUTER JOINS ON A PARALLEL DATABASE MANAGEMENT SYSTEM                                |
| 83209035     | Published   |               | 5/1/2013    |            | 13/875046          | US | INCREMENTALLY UPDATED SAMPLE TABLES                                                                       |
| 82094525     | Granted     | 7392519       | 9/23/2003   | 6/24/2008  | 10/667525          | US | Localization Cataloging Tool                                                                              |
| 82243427     | Published   |               | 10/30/2008  |            | 12/289602          | US | Federated Configuration Data Management                                                                   |

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| 82245050     | Published   |               | 10/16/2008  |            | 12/253001          | US | System and Method for Displaying Interactive Graphical Representations of Workgroups Manipulatable to Input Constraints (As Amended)    |
| 82264274     | Published   |               | 10/28/2010  |            | 12/914459          | US | METHOD AND SYSTEM FOR TIME SHEET MESSAGING                                                                                              |
| 82581660     | Granted     | 8504585       | 5/31/2011   | 41492      | 13/149869          | US | MATCHING A USER TO A CONVERSATION                                                                                                       |
| 82923471     | Granted     | 8938406       | 7/30/2009   | 1/20/2015  | 13/384516          | US | Constructing A Bayesian Network Based On Received Events Associated With Network Entities                                               |
| 83097889     | Published   |               | 10/25/2012  |            | 13/660422          | US | TARGET TREE GENERATION                                                                                                                  |
| 83118742     | Published   |               | 5/27/2010   |            | 13/696411          | US | Bundling Configuration Items Into A Composite Configuration Item                                                                        |
| 83719064     | Published   |               | 5/20/2011   |            | 14/118235          | US | SYSTEM AND METHOD FOR CONFIGURATION POLICY EXTRACTION                                                                                   |
| 83822656     | Application |               | 4/30/2014   |            | 14/266135          | US | ACTIONS FOR AN INFORMATION TECHNOLOGY CASE                                                                                              |
| 81956492     | Granted     | 6012095       | 11/18/1997  | 36529      | 08/972830          | US | Generic Notification Framework System And Method For Enhancing Operation Of A Management Station On A Network                           |
| 81982832     | Granted     | 7307962       | 3/2/2001    | 39427      | 09/796708          | US | System For Inference Of Network Infrastructure Devices                                                                                  |
| 81982895     | Granted     | 7050931       | 11/6/2003   | 38860      | 10/703007          | US | Computing Performance Thresholds Based On Variations In Network Traffic Patterns                                                        |
| 81982898     | Granted     | 7185109       | 4/20/2001   | 39140      | 09/838162          | US | RECURSIVE DISCOVERY OF CDP TYPE OF NODES IN A NETWORK OF VARIOUS NODE TYPES                                                             |
| 81985019     | Granted     | 6944660       | 5/4/2001    | 38608      | 09/848216          | US | System And Method For Monitoring Browser Event Activities                                                                               |
| 82008680     | Granted     | 5764883       | 3/28/1996   | 35955      | 08/623353          | US | SYSTEM AND METHOD FOR CHECKING FOR DYNAMIC RESOURCE MISUSE IN A COMPUTER PROGRAM                                                        |
| 82032902     | Granted     | 6148338       | 4/3/1998    | 36844      | 09/055057          | US | SYSTEM FOR LOGGING AND ENABLING ORDERED RETRIEVAL OF MANAGEMENT EVENTS                                                                  |
| 82034342     | Granted     | 6147693       | 5/29/1998   | 36844      | 09/087363          | US | Localizable Date Time Spinner                                                                                                           |
| 82038026     | Granted     | 6175363       | 5/29/1998   | 36907      | 09/086635          | US | METHOD AND SYSTEM TO PROVIDE FUNCTIONALITY ACCESS BASED ON USER APPROACH TO NETWORK AND SYSTEM MANAGEMENT TASKS                         |
| 82060061     | Granted     | 6941367       | 5/10/2001   | 38601      | 09/853103          | US | METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR MONITORING OBJECTS IN AN IT NETWORK                                                     |
| 82070618     | Granted     | 6920492       | 6/18/2001   | 7/19/2005  | 09/883723          | US | Process For Controlling Devices Of An Intranet Network Through The Web                                                                  |
| 82106513     | Granted     | 7451203       | 12/22/2003  | 11/11/2008 | 10/740897          | US | Method And System For Communicating Between A Management Station And At Least Two Networks Having Duplicate Internet Protocol Addresses |
| 82173689     | Granted     | 7571181       | 12/22/2004  | 40029      | 11/021956          | US | Network Usage Analysis System And Method For Detecting Network Congestion                                                               |

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| 82174253     | Granted   | 7483384       | 9/22/2003   | 1/27/2009  | 10/668888          | US | System And Method For Monitoring Network Traffic                                                       |
| 82177934     | Granted   | 8213439       | 12/29/2004  | 7/3/2012   | 11/023409          | US | Method And System For Managing A Network Having An HSRP Group                                          |
| 82189361     | Granted   | 7876694       | 7/2/2004    | 1/25/2011  | 10/884468          | US | IDENTIFYING VPN FAULTS BASED ON VIRTUAL ROUTING ADDRESS AND EDGE INTERFACE RELATIONSHIP INFORMATION    |
| 82222073     | Granted   | 7127498       | 9/16/2002   | 39014      | 10/244825          | US | Software Application Domain And Storage Domain Constraining Process And Method                         |
| 82223069     | Granted   | 6584072       | 3/8/2000    | 37796      | 09/521475          | US | METHOD FOR DETERMINING THE DROP RATE, THE TRANSIT DELAY, AND THE BREAK STATE OF COMMUNICATIONS OBJECTS |
| 82223072     | Granted   | RE40744       | 11/20/2001  | 39980      | 09/988789          | US | Method For Determining The Drop Rate, The Transit Delay And The Break State Of Communications Objects  |
| 82223195     | Granted   | 6587440       | 7/8/1999    | 7/1/2003   | 09/349155          | US | METHOD FOR DETERMINING COMPUTER NETWORK TOPOLOGIES                                                     |
| 82223321     | Granted   | 6411997       | 11/15/1996  | 6/25/2002  | 08/749671          | US | Method Of Determining The Topology Of A Network Of Objects                                             |
| 82235684     | Granted   | 8180718       | 9/27/2008   | 5/15/2012  | 12/239751          | US | ENGINE FOR PERFORMING ROOT CAUSE AND EFFECT ANALYSIS                                                   |
| 82239371     | Published |               | 9/27/2008   |            | 12/239748          | US | Business Process Optimization And Problem Resolution                                                   |
| 82249418     | Published |               | 3/16/2009   |            | 12/404968          | US | Extendable Distributed Network Management System And Method                                            |
| 82259282     | Granted   | 8464279       | 12/18/2009  | 6/11/2013  | 12/641876          | US | DOMAIN EVENT CORRELATION                                                                               |
| 82260035     | Granted   | 8958310       | 4/17/2010   | 2/17/2015  | 12/762303          | US | Investigating Quality Of Service Disruptions In Multicast Forwarding Trees                             |
| 82263152     | Granted   | 8924537       | 9/9/2010    | 12/30/2014 | 12/878684          | US | BUSINESS PROCESSES TRACKING                                                                            |
| 82752159     | Published |               | 5/31/2011   |            | 13/149113          | US | IDENTIFYING A DIFFERENCE IN APPLICATION PERFORMANCE                                                    |
| 82841900     | Published |               | 10/17/2011  |            | 13/274918          | US | DISCOVERING REPRESENTATIVE COMPOSITE CI PATTERNS IN AN IT SYSTEM                                       |
| 82853115     | Granted   | 8634321       | 12/18/2009  | 1/21/2014  | 13/259098          | US | Proxy Agents In A Network                                                                              |
| 82963059     | Published |               | 4/24/2012   |            | 13/454572          | US | DETECTING ABNORMAL BEHAVIOR IN THE CLOUD SYSTEM BASED ON TIME INTERVALS (as amended)                   |
| 83012811     | Allowed   |               | 8/23/2012   |            | 13/592858          | US | DETERMINING THE TYPE OF A NETWORK TIER                                                                 |
| 83014334     | Allowed   |               | 7/27/2012   |            | 13/560401          | US | MONITORING THREAD STARVATION USING STACK TRACE SAMPLING AND BASED ON A TOTAL ELAPSED TIME              |
| 83037620     | Published |               | 8/9/2012    |            | 13/571214          | US | NETWORK MONITORING                                                                                     |
| 83098516     | Published |               | 11/28/2012  |            | 13/687584          | US | GENERATING A GENERALIZED UNIFORM RESOURCE IDENTIFIER                                                   |

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| 83184710     | Published   |               | 8/6/2010    |            | 13/812949          | US | SYSTEM AND METHODS FOR APPORTIONING POWER CONSUMPTION                                                         |
| 83185171     | Granted     | 9122784       | 8/26/2010   | 9/1/2015   | 13/812613          | US | ISOLATION OF PROBLEMS IN A VIRTUAL ENVIRONMENT                                                                |
| 83617593     | Published   |               | 3/17/2011   |            | 14/002274          | US | SELF-ORGANIZATION OF A SATELLITE GRID                                                                         |
| 84312725     | Application |               | 7/9/2015    |            | 14/795280          | US | VARIANCE BASED TIME SERIES DATASET ALIGNMENT                                                                  |
| 84312977     | Application |               | 4/3/2013    |            | 14/765319          | US | EXPLORATION MAPS FOR VISUALIZING SOFTWARE PROBLEMS                                                            |
| 82216889     | Granted     | 8548947       | 4/28/2006   | 10/1/2013  | 11/413534          | US | KNOWLEDGE                                                                                                     |
| 82241990     | Granted     | 8549480       | 9/27/2008   | 10/1/2013  | 12/239753          | US | Systems And Methods For File Maintenance                                                                      |
| 82249358     | Granted     | 8291068       | 1/14/2009   | 10/16/2012 | 12/320004          | US | Maintenance For Automated Software Testing                                                                    |
| 82259411     | Published   |               | 10/26/2009  |            | 12/605416          | US | Automatic Protocol Detection                                                                                  |
| 82259657     | Granted     | 8549476       | 7/30/2009   | 10/1/2013  | 12/512841          | US | GRAPHICAL USER INTERFACE HIERARCHY GENERATION                                                                 |
| 82262471     | Published   |               | 8/31/2010   |            | 12/872245          | US | Comparison Of Result Of Program Operation To Result Of An Operation Of A Different Version Of The Program     |
| 82951878     | Published   |               | 7/30/2012   |            | 13/561685          | US | MAINTAINING A DATABASE OF PATCH DATA                                                                          |
| 82963823     | Granted     | 8874736       | 4/23/2012   | 41940      | 13/453034          | US | APPLICATION TESTING                                                                                           |
| 83701566     | Published   |               | 5/3/2011    |            | 14/114145          | US | EVENT EXTRACTOR                                                                                               |
| 83991701     | Published   |               | 1/26/2012   |            | 14/373843          | US | AUTOMATIC CLASSIFICATION ADJUSTMENT OF RECORDED ACTIONS FOR AUTOMATION SCRIPT                                 |
| 83992637     | Published   |               | 1/31/2012   |            | 14/374841          | US | IMAGE-BASED APPLICATION AUTOMATION                                                                            |
| 84312957     | Application |               | 2/27/2013   |            | 14/761583          | US | CONTINUOUS DEPLOYMENT OF CODE CHANGES                                                                         |
| 81977462     | Granted     | 7062649       | 1/12/2001   | 6/13/2006  | 09/760236          | US | DETERMINING EVENT AND INPUT COVERAGE METRICS FOR A GRAPHICAL USER INTERFACE CONTROL INSTANCE                  |
| 81977465     | Granted     | 7065644       | 1/12/2001   | 6/20/2006  | 09/759932          | US | System And Method For Categorizing Security Profile Rules Within A Computer System                            |
| 81977591     | Granted     | 7213146       | 2/20/2001   | 5/1/2007   | 09/789200          | US | System And Method For Protecting A Security Profile Of A Computer System                                      |
| 81988457     | Granted     | 6801948       | 12/15/2000  | 10/5/2004  | 09/738078          | US | System And Method For Establishing Security Profiles Of Computers                                             |
| 82039334     | Granted     | 7062780       | 1/27/2004   | 6/13/2006  | 10/765621          | US | SYSTEM AND METHOD FOR A STREAMS BASED NETWORK ACCESS CONTROL FOR A COMPUTER                                   |
| 82061621     | Granted     | 7237107       | 12/7/2000   | 6/26/2007  | 09/732954          | US | Granular Access Control Of Inter-Process Communications In A Compartment Mode Workstation Labeled Environment |
| 82245614     | Granted     | 8763102       | 9/19/2008   | 6/24/2014  | 12/233666          | US | Method And Apparatus For Discovering A Trust Chain Imparting A Required Attribute To A Subject                |
| 82262966     | Published   |               | 6/22/2010   |            | 12/821118          | US | Single Sign On Infrastructure                                                                                 |
| 82581222     | Published   |               | 4/9/2007    |            | 11/733169          | US | MANAGING ENCRYPTION KEYS                                                                                      |
| 84162687     | Application |               | 8/29/2012   |            | 14/424401          | US | APPARATUS AND METHOD FOR DEVELOPING SECURE SOFTWARE                                                           |
|              |             |               |             |            |                    |    | SECURITY SCAN BASED ON DYNAMIC TAINT                                                                          |

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| 84173610     | Application |               | 2/27/2015   |            | 14/634563          | US | VISUALIZATION OF SECURITY RISKS                                                                                                           |
| 90050920     | Application |               | 9/4/2015    |            | 14/846462          | US | APPLICATION SECURITY TESTING                                                                                                              |
| 82097459     | Granted     | 7546339       | 8/12/2003   | 39973      | 10/638560          | US | CLIENT-SERVER APPARATUS AND METHOD USING ALTERNATIVE-RESPONSE PROTOCOLS                                                                   |
| 82104767     | Granted     | 6889160       | 5/30/2003   | 38475      | 10/449555          | US | Simulation Of Network Service Test Environments                                                                                           |
| 82176125     | Granted     | 7984128       | 5/23/2003   | 40743      | 10/445236          | US | System And Method For Discovering Managed Information Technology Resources                                                                |
| 82242923     | Published   |               | 10/30/2008  |            | 12/261760          | US | SYSTEMS AND METHODS FOR DEFINING BEST PRACTICES MANAGING BEST PRACTICES, AND VALIDATING SERVICE MODELS                                    |
| 82243616     | Granted     | 7124289       | 10/31/2000  | 10/17/2006 | 09/699350          | US | Automated Provisioning Framework For Internet Site Servers                                                                                |
| 82244171     | Granted     | 8676931       | 10/6/2006   | 3/18/2014  | 11/544185          | US | Methods For Managing Manual Changes To Network Infrastructures Through Automated Systems                                                  |
| 82244234     | Granted     | 7451071       | 7/26/2001   | 39763      | 09/766615          | US | Data Model For Automated Server Configuration                                                                                             |
| 82244237     | Granted     | 7743147       | 4/20/2001   | 40351      | 09/838142          | US | AUTOMATED PROVISIONING OF COMPUTING NETWORKS USING A NETWORK DATABASE DATA MODEL                                                          |
| 82244240     | Granted     | 8359377       | 4/30/2001   | 1/22/2013  | 09/843816          | US | Interface For Automated Deployment And Management Of Network Devices                                                                      |
| 82248170     | Granted     | 8239872       | 12/11/2008  | 41128      | 12/314481          | US | Method And System For Controlling Distribution Of Work Items To Threads In A Server                                                       |
| 82262906     | Published   |               | 7/8/2010    |            | 12/832436          | US | GENERATION OF OPERATIONAL POLICIES FOR MONITORING APPLICATIONS                                                                            |
| 82277513     | Granted     | 7290139       | 5/30/2003   | 10/30/2007 | 10/452802          | US | A SYSTEM FOR UPDATING AN INFORMATION STATE RECEIVED FROM ANOTHER COMPUTER BASED UPON VALIDATION RULES THAT APPLY TO THE INFORMATION STATE |
| 82850241     | Granted     | 8756324       | 12/2/2011   | 41807      | 13/310002          | US | AUTOMATIC CLOUD TEMPLATE APPROVAL                                                                                                         |
| 83014314     | Granted     | 8856740       | 7/31/2012   | 41919      | 13/563532          | US | Implementing Multiple Versions of a Plug-In Concurrently                                                                                  |
| 83117723     | Published   |               | 6/7/2011    |            | 13/811616          | US | METHOD AND SYSTEM FOR DEPLOYING SaaS (Software As A Service) SERVICE BUNDLES                                                              |
| 83140448     | Published   |               | 6/30/2010   |            | 13/702045          | US | SYSTEM AND METHOD FOR AN AUTOMATED DATA DISCOVERY SERVICE                                                                                 |
| 83142025     | Granted     | 9104668       | 7/1/2010    | 42227      | 13/703289          | US | MIGRATING ARTIFACTS BETWEEN SERVICE-ORIENTED ARCHITECTURE REPOSITORIES                                                                    |
| 83820120     | Application |               | 4/1/2014    |            | 14/242230          | US | CLOUD TOPOLOGY VISUALIZATIONS                                                                                                             |
| 83825696     | Application |               | 4/30/2014   |            | 14/266531          | US | DATA RECONSTRUCTION                                                                                                                       |
| 83992806     | Application |               | 12/3/2012   |            | 14/443875          | US | BINDING OF APPLICATION AND INFRASTRUCTURE BLUEPRINTS                                                                                      |
| 84118668     | Application |               | 7/3/2012    |            | 14/406671          | US | MANAGING A MULTITENANT CLOUD SERVICE                                                                                                      |

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| 84158376     | Published |               | 2/13/2015   |            | 14/622454          | US | CUSTOMIZED VIRTUAL MACHINE CREATION                                                                              |
| 82021166     | Granted   | 6021492       | 10/9/1996   | 2/1/2000   | 08/728008          | US | Software Metering Management Of Remote Computing Devices                                                         |
| 81995135     | Granted   | 7506046       | 7/31/2001   | 39889      | 09/919527          | US | Network Usage Analysis System And Method For Updating Statistical Models                                         |
| 82062749     | Granted   | 7334017       | 10/16/2001  | 39497      | 09/977501          | US | Content Provider Entity For Communication Session                                                                |
| 82071302     | Granted   | 7573899       | 4/18/2003   | 40036      | 10/418958          | US | Adaptor Module                                                                                                   |
| 82084097     | Granted   | 7782838       | 6/24/2003   | 40414      | 10/602444          | US | Intermediate Packetizing Of Voice Data For Communication Between Circuit-switched Network Nodes                  |
| 82100459     | Granted   | 8275368       | 10/21/2003  | 9/25/2012  | 10/688979          | US | Method And Apparatus For Operating A Telecommunication Platform                                                  |
| 82116941     | Granted   | 6226511       | 4/6/2000    | 5/1/2001   | 09/543836          | US | Method and apparatus for configuration of authentication center operations in a mobile telephone system          |
| 82181057     | Granted   | 7751389       | 7/1/2004    | 7/6/2010   | 10/883343          | US | Telecommunications System And Method For Forwarding Messages Based Upon Subscriber Identification Information    |
| 82206776     | Granted   | 8156194       | 7/10/2006   | 4/10/2012  | 11/483163          | US | Signalling Gateway                                                                                               |
| 82208399     | Granted   | 8244252       | 2/6/2008    | 8/14/2012  | 11/722843          | US | Method For Activating A Network-based Service In A Communication Network, Apparatus, Device And Network Therefor |
| 82208462     | Published |               | 8/3/2006    |            | 11/462049          | US | Method And System For Managing A Meeting                                                                         |
| 82223756     | Published |               | 10/1/2007   |            | 12/444962          | US | Management Of Access To Address Data                                                                             |
| 82224194     | Granted   | 8208930       | 6/21/2006   | 6/26/2012  | 11/471780          | US | Message Routing In A Telecommunication System                                                                    |
| 82228877     | Published |               | 3/31/2008   |            | 12/597290          | US | Obtaining Feedback For An Accessed Information Item                                                              |
| 82249856     | Granted   | 8885553       | 4/2/2010    | 11/11/2014 | 12/753549          | US | Packet Routing Method, Proxy Server And Apparatus                                                                |
| 82257911     | Granted   | 8331913       | 7/24/2009   | 12/11/2012 | 12/508692          | US | Method And Apparatus For Obtaining Subscriber Information                                                        |
| 82277762     | Granted   | 7409207       | 10/17/2003  | 8/5/2008   | 10/686661          | US | Communication System And Method                                                                                  |
| 82863311     | Granted   | 8923837       | 10/13/2011  | 12/30/2014 | 13/272700          | US | PROVISIONING A TELEPHONY NETWORK IN RESPONSE TO AN ELECTRONIC DEVICE ATTACHING TO THE NETWORK                    |
| 83012900     | Granted   | 8930294       | 7/30/2012   | 1/6/2015   | 13/562256          | US | PREDICTING USER ACTIVITY BASED ON USAGE DATA RECEIVED FROM CLIENT DEVICES                                        |
| 83097411     | Published |               | 12/14/2012  |            | 13/715753          | US | POLICY COORDINATION BETWEEN POLICY ENFORCEMENT POINTS                                                            |
| 83101464     | Granted   | 9152715       | 12/4/2012   | 10/6/2015  | 13/693626          | US | A Visual Approach to Searching Databases                                                                         |
| 83189144     | Granted   | 8738785       | 2/28/2013   | 5/27/2014  | 13/780931          | US | Message Exchange Between Software Components                                                                     |
| 83700272     | Published |               | 7/25/2011   |            | 14/110277          | US | Transferring a Conference Session Between Conference Servers Due to Failure                                      |
| 81966914     | Granted   | 6839771       | 4/13/2000   | 1/4/2005   | 09/549124          | US | METHOD AND SYSTEM FOR USING A UNIVERSAL SERIAL BUS (USB) AS A PEER-TO-PEERNETWORK                                |

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| 82003997     | Granted | 7320130       | 3/25/2003   | 1/15/2008  | 10/395090          | US | Mutual Exclusion Lock Implementation For A Computer Network                                                                     |
| 82007000     | Granted | 7447146       | 12/19/2001  | 11/4/2008  | 10/028298          | US | METHOD AND APPARATUS FOR SUPPORTING MULTIPLE INDEPENDENT FAILURE DOMAINS                                                        |
| 82065806     | Granted | 7822862       | 6/9/2003    | 10/26/2010 | 10/457021          | US | METHOD OF SATISFYING A DEMAND ON A NETWORK FOR A NETWORK RESOURCE                                                               |
| 82087784     | Granted | 7281056       | 6/4/2002    | 39364      | 10/163290          | US | Assigning A Device To A Network                                                                                                 |
| 82166258     | Granted | 7346801       | 8/1/2003    | 39525      | 10/633161          | US | PERSISTENT RESERVATION IO BARRIERS                                                                                              |
| 82179686     | Granted | 7308638       | 6/29/2004   | 12/11/2007 | 10/879255          | US | System And Method For Controlling Application Of An Error Correction Code (ECC) Algorithm In A Memory Subsystem                 |
| 82179932     | Granted | 8176259       | 1/20/2004   | 5/8/2012   | 10/760813          | US | System And Method For Resolving Transactions In A Cache Coherency Protocol                                                      |
| 82181867     | Granted | 7890798       | 3/22/2004   | 2/15/2011  | 10/806261          | US | Computer Cluster With Second-node Instance Of Application Having Access To State Snapshot Of First-node Instance Of Application |
| 82182056     | Granted | 8281079       | 1/13/2004   | 41184      | 10/756535          | US | Multi-processor System Receiving Input From A Pre-fetch Buffer                                                                  |
| 82203218     | Granted | 8316111       | 10/11/2005  | 41233      | 11/248873          | US | System And Methods For Placing And Dragging Programmatic Packages In Clustered Computing Systems                                |
| 81967727     | Granted | 6763459       | 1/14/2000   | 7/13/2004  | 09/483356          | US | Lightweight Public Key Infrastructure Employing Disposable Certificates                                                         |
| 81971849     | Granted | 7607135       | 6/15/2001   | 40106      | 09/882845          | US | Apparatus And Method For Enhancing Performance Of A Computer System                                                             |
| 81984836     | Granted | 6823300       | 11/10/2000  | 38314      | 09/709695          | US | Memory Efficient Occurrence Model Design For VLSI Cad                                                                           |
| 81994574     | Granted | 6826573       | 2/15/2000   | 38321      | 09/504205          | US | Method For Queue Issue Pointer                                                                                                  |
| 82001252     | Granted | 7571143       | 1/15/2002   | 40029      | 10/045149          | US | Software Pay-per-use Pricing                                                                                                    |
| 82017674     | Granted | 6219832       | 10/28/1998  | 36998      | 09/181588          | US | System And Method Of Using Annotations To Optimize Dynamically Translated Code In The Presence Of Signals                       |
| 82029785     | Granted | 6154878       | 7/21/1998   | 36858      | 09/120040          | US | System And Method For On-line Replacement Of Software Multi-Threaded Read Ahead Prediction By Pattern Recognition               |
| 82031531     | Granted | 6070230       | 12/29/1997  | 5/30/2000  | 08/999027          | US | SYSTEM AND METHOD FOR EFFICIENTLY BLOCKING EVENT SIGNALS ASSOCIATED WITH AN OPERATING SYSTEM                                    |
| 82031969     | Granted | 7386861       | 7/23/2003   | 39609      | 10/625790          | US | System And Method For Efficiently Blocking Event Signals Associated With An Operating System                                    |
| 82083977     | Granted | 7266810       | 4/9/2002    | 39329      | 10/120036          | US | Runtime Profiling Of Platform-independent Software Applications                                                                 |
| 82094402     | Granted | 7415699       | 6/27/2003   | 8/19/2008  | 10/608330          | US | METHOD AND APPARATUS FOR CONTROLLING EXECUTION OF A CHILD PROCESS GENERATED BY A MODIFIED PARENT PROCESS                        |

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| 82099208     | Granted | 8156217       | 11/24/2003  | 4/10/2012  | 10/7/23643         | US | Dynamically Balancing Load For Servers                     |
| 82103705     | Granted | 7523503       | 1/21/2003   | 4/21/2009  | 10/349423          | US | METHOD FOR PROTECTING SECURITY OF NETWORK                  |
|              |         |               |             |            |                    |    | INTRUSION DETECTION SENSORS                                |
| 82104575     | Granted | 7328238       | 1/29/2003   | 2/5/2008   | 10/353562          | US | System And Method For Control Of Web Pages                 |
| 8210323      | Granted | 5884328       | 8/29/1997   | 36235      | 08/920401          | US | SYSTEM AND METHOD FOR SYNCHRONIZING A LARGE                |
|              |         |               |             |            |                    |    | DATABASE AND ITS REPLICA                                   |
| 8210383      | Granted | 5974574       | 9/30/1997   | 10/26/1999 | 08/940447          | US | METHOD OF COMPARING REPLICATED DATABASES USING             |
|              |         |               |             |            |                    |    | CHECKSUM INFORMATION                                       |
| 8210443      | Granted | 6115830       | 3/28/1998   | 36774      | 09/050226          | US | FAILURE RECOVERY FOR PROCESS RELATIONSHIPS IN A            |
|              |         |               |             |            |                    |    | SINGLE SYSTEM IMAGE ENVIRONMENT                            |
| 8210569      | Granted | 6724762       | 10/25/2002  | 38097      | 10/280772          | US | SYSTEM AND METHOD FOR IMPLEMENTING MULTI-PATHING           |
|              |         |               |             |            |                    |    | DATA TRANSFERS IN A SYSTEM AREA NETWORK                    |
| 8211883      | Granted | 5818445       | 9/9/1992    | 10/6/1998  | 07/943221          | US | METHOD AND SYSTEM FOR CREATING COMPUTER-                   |
|              |         |               |             |            |                    |    | PROGRAM-BASED APPLICATIONS WITH DEVELOPER                  |
|              |         |               |             |            |                    |    | SPECIFIED LOOK AND FEEL                                    |
| 82128113     | Granted | 5887169       | 3/15/1996   | 36242      | 08/816321          | US | METHOD AND APPARATUS FOR PROVIDING DYNAMIC ENTRY           |
|              |         |               |             |            |                    |    | POINTS INTO A SOFTWARE LAYER                               |
| 82132736     | Granted | 6131118       | 7/7/1998    | 36809      | 09/111042          | US | FLEXIBLE DISPLAY OF MANAGEMENT DATA IN A                   |
|              |         |               |             |            |                    |    | PROGRAMMABLE EVENT DRIVEN PROCESSING SYSTEM                |
| 82136546     | Granted | 6237005       | 6/29/1998   | 37033      | 09/106300          | US | WEB SERVER MECHANISM FOR PROCESSING MULTIPLE               |
|              |         |               |             |            |                    |    | TRANSACTIONS IN AN INTERPRETED LANGUAGE EXECUTION          |
|              |         |               |             |            |                    |    | ENVIRONMENT                                                |
| 82165199     | Granted | 6061773       | 5/3/1996    | 36655      | 08/642368          | US | VIRTUAL MEMORY SYSTEM WITH PAGE TABLE SPACE                |
|              |         |               |             |            |                    |    | SEPARATING A PRIVATE SPACE AND SHARED SPACE IN A           |
|              |         |               |             |            |                    |    | VIRTUAL MEMORY                                             |
| 82166075     | Granted | 7596563       | 10/28/1999  | 9/29/2009  | 09/428384          | US | Computerized File System And Method                        |
| 82166381     | Granted | 7114020       | 4/28/2000   | 9/26/2006  | 09/561444          | US | SOFTWARE MECHANISM FOR UNIQUE IDENTIFICATION OF            |
|              |         |               |             |            |                    |    | SCSI DEVICE                                                |
| 82180997     | Granted | 7694295       | 1/28/2004   | 4/6/2010   | 10/766064          | US | Displaying A Vendor Provided Information Screen In         |
|              |         |               |             |            |                    |    | Response To A Log-in Experience                            |
| 82188425     | Granted | 7484221       | 10/20/2004  | 1/27/2009  | 10/970480          | US | Method And Apparatus For Logging The Execution History Of  |
|              |         |               |             |            |                    |    | An Operating System Kernel                                 |
| 82189796     | Granted | 7281163       | 6/22/2004   | 10/9/2007  | 10/874035          | US | Management Device Configured To Perform A Data Dump        |
| 82190606     | Granted | 8108560       | 11/22/2005  | 1/31/2012  | 11/283879          | US | A Method And Apparatus For Managing Data Transfer In A     |
|              |         |               |             |            |                    |    | Computer Memory                                            |
| 82191734     | Granted | 7403535       | 12/14/2004  | 7/22/2008  | 11/013185          | US | Aggregation Of Network Resources Providing Offloaded       |
|              |         |               |             |            |                    |    | Connections Between Applications Over A Network            |
| 82191920     | Granted | 8977651       | 4/14/2004   | 42073      | 10/823845          | US | Method And Apparatus For Multi-process Access To A Linked- |
|              |         |               |             |            |                    |    | list                                                       |

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| 82195787     | Granted   | 7646708       | 8/22/2005   | 40190      | 11/208689          | US | Network Resource Teaming Combining Receive Load-balancing With Redundant Network Connections                                                                       |
| 82197851     | Granted   | 7478265       | 10/14/2004  | 39826      | 10/964862          | US | Error Recovery For Input/output Operations                                                                                                                         |
| 82200158     | Granted   | 7392374       | 9/21/2004   | 39623      | 10/946200          | US | Moving Kernel Configurations                                                                                                                                       |
| 82200161     | Granted   | 7467328       | 9/3/2004    | 39798      | 10/934506          | US | Kernel Configuration Recovery                                                                                                                                      |
| 82200476     | Granted   | 7818623       | 10/18/2006  | 10/19/2010 | 11/550538          | US | KERNEL DEBUGGING IN A CLUSTER COMPUTING SYSTEM                                                                                                                     |
| 82200848     | Granted   | 8271993       | 3/4/2005    | 9/18/2012  | 11/885395          | US | A Method And Apparatus For Facilitating Pipeline Throughput                                                                                                        |
| 82201661     | Granted   | 8799466       | 1/31/2005   | 8/5/2014   | 11/048254          | US | Method And Apparatus For Automatic Verification Of A Network Access Control Construct For A Network Switch                                                         |
| 82204715     | Granted   | 8862734       | 10/25/2006  | 41926      | 11/586228          | US | System And Method For Selectively Controlling The Addition Of Reserve Computing Capacity                                                                           |
| 82204784     | Granted   | 7882430       | 10/27/2005  | 2/1/2011   | 11/260918          | US | Utility, Method And Device Providing Vector Images That May Be Formatted For Display In Different Locales                                                          |
| 82205027     | Granted   | 8312194       | 9/30/2005   | 11/13/2012 | 11/240256          | US | Method And Apparatus For Validation Of Continuous Access To A Data Structure                                                                                       |
| 82206968     | Granted   | 7590509       | 6/23/2005   | 9/15/2009  | 11/159607          | US | System And Method For Testing A Processor                                                                                                                          |
| 82207337     | Granted   | 7756803       | 3/3/2005    | 7/13/2010  | 11/885475          | US | METHOD OF PREDICTING AVAILABILITY OF A SYSTEM                                                                                                                      |
| 82207463     | Granted   | 7797756       | 4/18/2006   | 9/14/2010  | 11/406418          | US | System And Methods For Managing Software Licenses In A Variable Entitlement Computer System                                                                        |
| 82207715     | Granted   | 7693045       | 12/22/2005  | 4/6/2010   | 11/315812          | US | Verifying Network Connectivity                                                                                                                                     |
| 82208402     | Granted   | 8739288       | 7/31/2007   | 41786      | 11/888772          | US | Automatic Detection Of Vulnerability Exploits                                                                                                                      |
| 82213211     | Granted   | 8738346       | 10/26/2006  | 5/27/2014  | 11/586928          | US | Method And Apparatus For Controlling Multiple Simulations                                                                                                          |
| 82213955     | Granted   | 7549085       | 4/28/2006   | 6/16/2009  | 11/413898          | US | Method And Apparatus To Insert Special Instruction                                                                                                                 |
| 82214459     | Granted   | 8156370       | 12/11/2007  | 4/10/2012  | 12/520542          | US | Computer System And Method Of Control Thereof                                                                                                                      |
| 82216016     | Granted   | 8108315       | 6/19/2006   | 40939      | 11/455515          | US | Discovering Software Code Subject To Licenses                                                                                                                      |
| 82216265     | Published |               | 9/7/2006    |            | 11/518084          | US | Methods, Apparatus And Computer Systems That Enable Hardware Module Use Rights Owned By One Server To Be Claimed For Use By Another Server In A Common Share Group |
| 82217579     | Granted   | 7711980       | 5/22/2007   | 5/4/2010   | 11/751789          | US | COMPUTER SYSTEM FAILURE MANAGEMENT WITH TOPOLOGY-BASED FAILURE IMPACT DETERMINATIONS                                                                               |
| 82217642     | Granted   | 8032884       | 10/31/2006  | 40820      | 11/555229          | US | Thread Hand Off                                                                                                                                                    |
| 82219268     | Granted   | 7516358       | 12/20/2005  | 39910      | 11/312201          | US | Tuning Core Voltages Of Processors                                                                                                                                 |
| 82219328     | Granted   | 9003410       | 1/30/2007   | 42101      | 11/700748          | US | ABSTRACTING A MULTITHREADED PROCESSOR CORE TO A SINGLE THREADED PROCESSOR CORE                                                                                     |
| 82219514     | Granted   | 8739162       | 4/27/2007   | 41786      | 11/796423          | US | ACCURATE MEASUREMENT OF MULTITHREADED PROCESSOR CORE UTILIZATION AND LOGICAL PROCESSOR UTILIZATION                                                                 |

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| 82220135     | Granted     | 7788477       | 1/31/2007   | 40421      | 11/701310          | US | METHODS, APPARATUS AND ARTICLES OF MANUFACTURE FOR CONTROLLING OPERATING SYSTEM IMAGES FOR DISKLESS SERVERS                   |
| 82222385     | Granted     | 7941812       | 1/30/2007   | 5/10/2011  | 11/699950          | US | INPUT/OUTPUT VIRTUALIZATION THROUGH OFFLOAD TECHNIQUES                                                                        |
| 82223009     | Granted     | 7729368       | 1/19/2007   | 6/1/2010   | 11/655581          | US | NETWORK BUFFER CACHING                                                                                                        |
| 82223012     | Granted     | 7620854       | 1/30/2007   | 11/17/2009 | 11/668489          | US | Method And System For Handling Input/output (I/O) Errors                                                                      |
| 82224506     | Granted     | 8196117       | 1/3/2007    | 6/5/2012   | 11/649464          | US | Merging Sample Based Profiling Data                                                                                           |
| 82225133     | Application |               | 1/30/2007   |            | 11/700695          | US | INCREMENTAL UPDATING OF A WEBPAGE                                                                                             |
| 82227632     | Granted     | 8037477       | 1/23/2007   | 10/11/2011 | 11/657493          | US | EFFICIENT DETECTION OF SOURCES ON INCREASING MEMORY CONSUMPTION                                                               |
| 82228445     | Published   |               | 6/25/2008   |            | 12/145923          | US | A Method And A Computer Program For Inode Allocation And De-allocation                                                        |
| 82229753     | Granted     | 8341285       | 9/30/2008   | 12/25/2012 | 12/242714          | US | A Method And System For Transferring Files                                                                                    |
| 82235369     | Granted     | 8782655       | 7/1/2008    | 7/15/2014  | 12/216235          | US | CONTROLLING COMPUTING RESOURCE CONSUMPTION                                                                                    |
| 82238303     | Granted     | 8712597       | 6/11/2008   | 4/29/2014  | 12/155930          | US | Method Of Optimizing Air Mover Performance Characteristics To Minimize Temperature Variations In A Computing System Enclosure |
| 82240493     | Published   |               | 4/21/2009   |            | 12/427615          | US | Method Of Computer Clustering                                                                                                 |
| 82246670     | Application |               | 6/30/2009   |            | 12/494861          | US | Out-of-band Management Of Virtual Machines                                                                                    |
| 82247048     | Granted     | 8046460       | 1/23/2009   | 10/25/2011 | 12/358317          | US | AUTOMATIC SERVER DEPLOYMENT USING A PRE-PROVISIONED LOGICAL VOLUME                                                            |
| 82247732     | Granted     | 8516099       | 1/26/2009   | 41506      | 12/359564          | US | SCALING MANAGEMENT TASKS PERFORMED BY A MANAGEMENT SYSTEM ACCORDING TO A DETERMINED SIZE OF A MANAGED ENVIRONMENT             |
| 82248920     | Granted     | 8392736       | 7/31/2009   | 3/5/2013   | 12/533849          | US | Managing Memory Power Usage                                                                                                   |
| 82249295     | Granted     | 9031876       | 6/19/2009   | 5/12/2015  | 12/488068          | US | Managing Keys For Encrypted Shared Documents                                                                                  |
| 82258409     | Granted     | 9154385       | 3/17/2009   | 10/6/2015  | 12/406067          | US | LOGICAL SERVER MANAGEMENT INTERFACE DISPLAYING REAL-SERVER TECHNOLOGIES                                                       |
| 82258598     | Published   |               | 8/6/2010    |            | 12/851558          | US | Classification Of Application Commands                                                                                        |
| 82261718     | Granted     | 8505020       | 8/29/2010   | 8/6/2013   | 12/870835          | US | Computer Workload Migration Using Processor Pooling                                                                           |
| 82263782     | Granted     | 8353489       | 9/21/2010   | 41289      | 12/886749          | US | MOUNTING KIT                                                                                                                  |
| 82278203     | Granted     | 7827480       | 2/28/2003   | 11/2/2010  | 10/375083          | US | System And Method Of Using A Transactional Unit Comprised Of Transactional Subunits                                           |
| 82672122     | Published   |               | 8/29/2011   |            | 13/220272          | US | UPDATING COMPUTER READABLE INSTRUCTIONS ON DEVICES IN A DATA STORAGE FABRIC                                                   |
| 82904410     | Published   |               | 1/31/2012   |            | 13/362508          | US | REMOTE SERVER CONFIGURATION                                                                                                   |
| 83159755     | Published   |               | 1/24/2013   |            | 13/748761          | US | RESOURCE-TYPE WEIGHTING OF USE RIGHTS                                                                                         |
| 84273667     | Application |               | 8/3/2015    |            | 14/816062          | US | VIRTUAL MACHINE MIGRATION                                                                                                     |

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| 81968165     | Granted   | 7103639       | 12/5/2000   | 9/5/2006   | 09/730221          | US | Method And Apparatus For Processing Unit Synchronization For Scalable Parallel Processing      |
| 81987518     | Granted   | 7342805       | 9/10/2003   | 3/11/2008  | 10/659452          | US | Capacitor Plate For Substrate Components                                                       |
| 81988514     | Granted   | 6843664       | 1/18/2002   | 1/18/2005  | 10/053763          | US | Electrical Adapter                                                                             |
| 81992948     | Granted   | 7103654       | 8/7/2001    | 9/5/2006   | 09/923881          | US | Server System With Segregated Management Lan And Payload Lan                                   |
| 81993887     | Granted   | 7103761       | 8/7/2001    | 9/5/2006   | 09/923880          | US | Server System With Multiple Management User Interfaces                                         |
| 82002941     | Granted   | 6807596       | 7/26/2001   | 10/19/2004 | 09/916752          | US | System For Removing And Replacing Core I/O Hardware                                            |
| 82004252     | Published |               | 2/6/2002    |            | 10/071442          | US | Operational Computer System                                                                    |
| 82009181     | Granted   | 5860095       | 1/2/1996    | 1/12/1999  | 08/582542          | US | System For Offering Services Using Network Of Unowned Computers                                |
| 82019795     | Granted   | 6223256       | 7/22/1997   | 4/24/2001  | 08/898637          | US | CONFLICT CACHE HAVING CACHE MISS COUNTERS FOR A COMPUTER MEMORY SYSTEM                         |
| 82085036     | Granted   | 6843660       | 11/21/2003  | 1/18/2005  | 10/719937          | US | Computer Cache Memory With Classes And Dynamic Selection Of Replacement Algorithms             |
| 82087094     | Granted   | 6976119       | 6/14/2002   | 12/13/2005 | 10/173331          | US | Cable Systems And Related Methods                                                              |
| 82087409     | Granted   | 6842345       | 8/29/2002   | 1/11/2005  | 10/230771          | US | Method And System For Providing A Location Of A Data Interface                                 |
| 82089530     | Granted   | 6829142       | 10/25/2002  | 12/7/2004  | 10/280471          | US | Circuit Board Support Assembly                                                                 |
| 82095152     | Granted   | 7039736       | 1/15/2003   | 5/2/2006   | 10/342886          | US | Cell Thermal Connector                                                                         |
| 82095647     | Granted   | 6840388       | 10/28/2002  | 1/11/2005  | 10/282807          | US | Systems And Methods For Accessing Bus-Mastered System Resources                                |
| 82095650     | Granted   | 6795307       | 10/31/2002  | 9/21/2004  | 10/285892          | US | Tool-Less Rack Mounting System                                                                 |
| 82099769     | Granted   | 7386744       | 3/15/2004   | 6/10/2008  | 10/801247          | US | Tool-Less Latch Mechanism For An Enclosure Panel                                               |
| 82102205     | Granted   | 6771507       | 1/31/2003   | 8/3/2004   | 10/355707          | US | RACK EQUIPMENT POWER PRICING PLAN CONTROL SYSTEM AND METHOD                                    |
| 82103954     | Granted   | 6995581       | 1/13/2005   | 2/7/2006   | 11/033751          | US | Power Module For Multi-Chip Printed Circuit Boards                                             |
| 82117559     | Granted   | 6469899       | 12/20/2000  | 10/22/2002 | 09/742755          | US | Apparatus And Method For Detecting And Rejecting High Impedance Failures In Chip Interconnects |
| 82120058     | Granted   | 7167371       | 7/30/2003   | 1/23/2007  | 10/630565          | US | MODULAR RACK-MOUNT SERVER ARRANGEMENT                                                          |
| 82121624     | Granted   | 6898676       | 10/3/2002   | 5/24/2005  | 10/263741          | US | LOW PROFILE LATCH ACTIVATOR                                                                    |
| 82121867     | Granted   | 6669497       | 6/25/2002   | 12/30/2003 | 10/178986          | US | COMPUTER SYSTEM SUPPORTING BOTH DIRTY-SHARED AND NON DIRTY-SHARED DATA PROCESSING ENTITIES     |
| 82121870     | Granted   | 6790068       | 11/20/2003  | 9/14/2004  | 10/719703          | US | SELF-LOCKING MECHANISM FOR A HOT PLUGGABLE PRINTED CIRCUIT BOARD                               |
| 82121996     | Granted   | 7092258       | 9/15/2003   | 8/15/2006  | 10/662657          | US | SELF-LOCKING MECHANISM FOR A HOT PLUGGABLE PRINTED CIRCUIT BOARD                               |
| 82128986     | Granted   | 5816673       | 10/11/1996  | 10/6/1998  | 08/730470          | US | Cable Management System And Method Of Installation And Operation Thereof                       |
|              |           |               |             |            |                    |    | COMPUTER CHASSIS ASSEMBLY                                                                      |

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| 82132175     | Granted | 6442021       | 6/15/1998   | 8/27/2002  |                    | 09/097873 US | HOT-PLUGGABLE DISK CARRIER HAVING ENHANCED ROTATIONAL DRIVE VIBRATION CONTROL CAPABILITY                                   |
| 82132544     | Granted | 6988626       | 7/31/1998   | 1/24/2006  |                    | 09/127571 US | COMPUTER COMPONENT RACK MOUNTING ARRANGEMENT                                                                               |
| 82133105     | Granted | 6185092       | 9/3/1999    | 2/6/2001   |                    | 09/390233 US | COMPUTER SYSTEM WITH IN-LINE SWITCHBOX MOUNTING                                                                            |
| 82133108     | Granted | 6208522       | 2/12/1999   | 3/27/2001  |                    | 09/249506 US | COMPUTER CHASSIS ASSEMBLY WITH A SINGLE CENTER PLUGGABLE MIDPLANE BOARD                                                    |
| 82133111     | Granted | 6459589       | 3/26/2001   | 10/1/2002  |                    | 09/817851 US | COMPUTER CHASSIS ASSEMBLY WITH A SINGLE CENTER PLUGGABLE MIDPLANE BOARD                                                    |
| 82134728     | Granted | 5822195       | 3/31/1997   | 10/13/1998 |                    | 08/834793 US | INTERFACE THAT PERMITS DATA BUS SIGNALS TO PASS BETWEEN HIGH FREQUENCY PROCESSING UNIT AND LOW FREQUENCY EXPANSION DEVICES |
| 82134980     | Granted | 6209065       | 10/24/1997  | 3/27/2001  |                    | 08/957230 US | MECHANISM FOR OPTIMIZING GENERATION OF COMMIT-SIGNALS IN A DISTRIBUTED SHARED-MEMORY SYSTEM                                |
| 82135541     | Granted | 5940868       | 7/18/1997   | 8/17/1999  |                    | 08/896393 US | LARGE MEMORY ALLOCATION METHOD AND APPARATUS                                                                               |
| 82136726     | Granted | 6185663       | 6/15/1998   | 2/6/2001   |                    | 09/094733 US | COMPUTER METHOD AND APPARATUS FOR FILE SYSTEM BLOCK ALLOCATION WITH MULTIPLE REDO                                          |
| 82137164     | Granted | 6060974       | 9/29/1998   | 5/9/2000   |                    | 09/162929 US | HEADER PLATE FOR A LOW PROFILE SURFACE MOUNT TRANSFORMER                                                                   |
| 82049576     | Granted | 6745294       | 6/8/2001    | 6/1/2004   |                    | 09/877539 US | Multi-Processor Computer System With Lock Driven Cache-Flushing System                                                     |
| 82051319     | Granted | 6156972       | 4/30/1999   | 12/5/2000  |                    | 09/302709 US | INNER BEZEL FOR A COMPUTER CHASSIS                                                                                         |
| 82054505     | Granted | 6654854       | 6/25/1999   | 11/25/2003 |                    | 09/344460 US | CACHING METHOD USING CACHE TAG AND CACHE DATA STORED IN DYNAMIC RAM EMBEDDED IN LOGIC CHIP                                 |
| 82058069     | Granted | 6442552       | 6/30/2000   | 8/27/2002  |                    | 09/608124 US | Method And Apparatus For Implementing Three Tier Client Asynchronous Transparency                                          |
| 82062872     | Granted | 7113911       | 11/21/2001  | 9/26/2006  |                    | 09/990768 US | Voice Communication Concerning A Local Entity                                                                              |
| 82066622     | Granted | 6272147       | 9/26/1997   | 8/7/2001   |                    | 08/938119 US | DATA NETWORKS                                                                                                              |
| 82071116     | Granted | 6943683       | 1/21/2003   | 9/13/2005  |                    | 10/349504 US | Location Device                                                                                                            |
| 82071737     | Granted | 6163881       | 3/20/1997   | 12/19/2000 |                    | 08/821743 US | Method Of Monitoring The Operation Of A Computer                                                                           |
| 82077044     | Granted | 6163797       | 7/22/1998   | 12/19/2000 |                    | 09/121206 US | APPLICATION DISPATCHER FOR SEAMLESS, SERVER APPLICATION SUPPORT FOR NETWORK TERMINALS AND NON-NETWORK TERMINALS            |
| 82078352     | Granted | 6076105       | 8/1/1997    | 6/13/2000  |                    | 08/905287 US | DISTRIBUTED RESOURCE AND PROJECT MANAGEMENT                                                                                |
| 82081724     | Granted | 6935419       | 2/20/2002   | 8/30/2005  |                    | 10/080002 US | Heat Sink Apparatus With Air Duct                                                                                          |
| 82082414     | Granted | 6670628       | 4/4/2002    | 12/30/2003 |                    | 10/116507 US | LOW HEAT LOSS AND SMALL CONTACT AREA COMPOSITE ELECTRODE FOR A PHASE CHANGE MEDIA MEMORY DEVICE                            |
| 82083602     | Granted | 6683322       | 3/1/2002    | 1/27/2004  |                    | 10/086606 US | FLEXIBLE HYBRID MEMORY ELEMENT                                                                                             |



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| 82085414     | Granted | 6670631       | 5/20/2002   | 12/30/2003 | 10/151856          | US | LOW-FORWARD-VOLTAGE MOLECULAR RECTIFIER                                                                            |
| 82085912     | Granted | 7310343       | 12/20/2002  | 12/18/2007 | 10/327356          | US | SYSTEMS AND METHODS FOR RAPID SELECTION OF DEVICES<br>IN A TREE TOPOLOGY NETWORK                                   |
| 82086533     | Granted | 6621728       | 1/31/2002   | 9/16/2003  | 10/061925          | US | METHOD OF WRITING A FOUR-TRANSISTOR MEMORY CELL<br>ARRAY                                                           |
| 82087406     | Granted | 6757179       | 8/29/2002   | 6/29/2004  | 10/230807          | US | Circuit Board Support Assembly                                                                                     |
| 82089470     | Granted | 6930884       | 6/11/2003   | 8/16/2005  | 10/458296          | US | Land Grid Array Assembly Using A Compressive Load                                                                  |
| 82091528     | Granted | 6755242       | 8/20/2002   | 6/29/2004  | 10/225335          | US | Active Heat Sink Structure With Directed Air Flow                                                                  |
| 82092965     | Granted | 7272806       | 2/19/2003   | 9/18/2007  | 10/368789          | US | System And Method For Evaluating Power And Ground Yields<br>A Package Design                                       |
| 82093775     | Granted | 6680852       | 9/30/2002   | 1/20/2004  | 10/262220          | US | Color-Coding Technique For Slot Selection In Bladed Systems                                                        |
| 82096964     | Granted | 7275242       | 10/4/2002   | 9/25/2007  | 10/264681          | US | System And Method For Optimizing A Program                                                                         |
| 82099706     | Granted | 7512701       | 1/16/2003   | 3/31/2009  | 10/345587          | US | System And Method For Efficiently Replicating A File Among<br>A Plurality Of Recipients In A Reliable Manner       |
| 82099766     | Granted | 7929022       | 9/15/2005   | 4/19/2011  | 11/226953          | US | Method Of Producing A Transit Graph                                                                                |
| 82099835     | Granted | 6861876       | 3/25/2003   | 38412      | 10/397938          | US | Pulse Evaluate Logic-Latch                                                                                         |
| 82100585     | Granted | 6841985       | 7/29/2003   | 1/11/2005  | 10/630175          | US | Method And Circuit For Measuring On-Chip, Cycle-To-Cycle<br>Clock Jitter                                           |
| 82101578     | Granted | 7404112       | 8/6/2003    | 7/22/2008  | 10/635103          | US | Data Selection Circuit For Performance Counter                                                                     |
| 82101584     | Granted | 7430696       | 8/6/2003    | 9/30/2008  | 10/635079          | US | Zeroing Circuit For Performance Counter                                                                            |
| 82101893     | Granted | 7088130       | 10/3/2005   | 8/8/2006   | 11/242402          | US | Partial Termination Voltage Current Shunting                                                                       |
| 82104761     | Granted | 7421500       | 1/10/2003   | 9/2/2008   | 10/340436          | US | Grid Computing Control System                                                                                      |
| 82105205     | Granted | 7320096       | 5/9/2003    | 1/15/2008  | 10/435153          | US | System And Method For Testing Memory At Full Bandwidth                                                             |
| 82105325     | Granted | 7392347       | 5/10/2003   | 6/24/2008  | 10/435140          | US | Systems And Methods For Buffering Data Between A<br>Coherency Cache Controller And Memory                          |
| 82107140     | Granted | 6870394       | 1/31/2003   | 3/22/2005  | 10/355591          | US | Controlled Input Molecular Crossbar Latch                                                                          |
| 82110695     | Granted | 6665811       | 8/24/2000   | 12/16/2003 | 09/645477          | US | METHOD AND APPARATUS FOR CHECKING COMMUNICATIVE<br>CONNECTIVITY BETWEEN PROCESSOR UNITS OF A<br>DISTRIBUTED SYSTEM |
| 82110821     | Granted | 6625745       | 3/17/2000   | 9/23/2003  | 09/528476          | US | NETWORK COMPONENT FAILURE IDENTIFICATION WITH<br>MINIMAL TESTING                                                   |
| 82116437     | Granted | 5991518       | 1/28/1997   | 36487      | 08/790269          | US | METHOD AND APPARATUS FOR SPLIT-BRAIN AVOIDANCE IN<br>A MULTI-PROCESSOR SYSTEM                                      |
| 82116443     | Granted | 5884018       | 1/28/1997   | 3/16/1999  | 08/789257          | US | METHOD AND APPARATUS FOR DISTRIBUTED AGREEMENT<br>ON PROCESSOR MEMBERSHIP IN A MULTI-PROCESSOR<br>SYSTEM           |
| 82117313     | Granted | 6456510       | 8/31/2000   | 37523      | 09/653133          | US | REGULATED DC POWER SUPPLY                                                                                          |
| 82117562     | Granted | 6615295       | 12/26/2000  | 9/2/2003   | 09/749111          | US | RELAXED READ COMPLETION ORDERING IN A SYSTEM USING<br>TRANSACTION ORDER QUEUE                                      |

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| 82117685     | Granted | 6751721       | 8/31/2000   | 6/15/2004  | 09/652165 US       | US | BROADCAST INVALIDATE SCHEME                                                                                                       |
| 82117688     | Granted | 7076597       | 10/14/2003  | 7/11/2006  | 10/685039 US       | US | Broadcast Invalidate Scheme                                                                                                       |
| 82117874     | Granted | 6654858       | 8/31/2000   | 37950      | 09/652324 US       | US | METHOD FOR REDUCING DIRECTORY WRITES AND LATENCY IN A HIGH PERFORMANCE, DIRECTORY-BASED, COHERENTLY CONSISTENT PROTOCOL           |
| 82117877     | Granted | 6704817       | 8/31/2000   | 38055      | 09/652323 US       | US | COMPUTER ARCHITECTURE AND SYSTEM FOR EFFICIENT MANAGEMENT OF BI-DIRECTIONAL BUS                                                   |
| 82117937     | Granted | 7079615       | 11/20/2001  | 7/18/2006  | 09/988691 US       | US | Expanded Comparator For Control Of Digital Delay Lines                                                                            |
| 82117940     | Granted | 7213087       | 8/31/2000   | 5/1/2007   | 09/651924 US       | US | Delay Locked Loop Or Phase Locked Loop                                                                                            |
| 82118066     | Granted | 6629257       | 8/31/2000   | 9/30/2003  | 09/652980 US       | US | MECHANISM TO CONTROL THE ALLOCATION OF AN N-SOURCE SHARED BUFFER                                                                  |
| 82118189     | Granted | 6633489       | 7/31/2001   | 10/14/2003 | 09/919295 US       | US | SYSTEM AND METHOD TO AUTOMATICALLY RESET AND INITIALIZE A CLOCKING SUBSYSTEM WITH RESET SIGNALING TECHNIQUE                       |
| 82118558     | Granted | 7421733       | 2/6/2002    | 9/2/2008   | 10/072840 US       | US | DYNAMIC ISOLATING MOUNT FOR PROCESSOR PACKAGES SYSTEM AND METHOD FOR PROVIDING MULTI-CLASS PROCESSING OF LOGIN REQUESTS           |
| 82118564     | Granted | 7284067       | 2/20/2002   | 39371      | 10/079359 US       | US | Method For Integrated Load Balancing Among Peer Servers                                                                           |
| 82119875     | Granted | 6718404       | 6/1/2001    | 4/6/2004   | 09/872721 US       | US | DATA MIGRATION USING PARALLEL, DISTRIBUTED TABLE DRIVEN I/O MAPPING                                                               |
| 82120184     | Granted | 6751710       | 6/11/2001   | 6/15/2004  | 09/878982 US       | US | Scalable Multiprocessor System And Cache Coherence Method                                                                         |
| 82120187     | Granted | 6622218       | 1/7/2002    | 9/16/2003  | 10/042029 US       | US | CACHE COHERENCE PROTOCOL ENGINE AND METHOD FOR EFFICIENT PROCESSING OF INTERLEAVED MEMORY TRANSACTIONS IN A MULTIPROCESSOR SYSTEM |
| 82120436     | Granted | 6714411       | 12/31/2001  | 38076      | 10/038799 US       | US | Computer Server Hot Plug Fan Tray Assembly And Method Of Fan Removal                                                              |
| 82120496     | Granted | 6669423       | 12/14/2001  | 37985      | 10/017958 US       | US | TOOLLESS THUMB SCREW WITH ADJUSTABLE HEIGHT KNOB                                                                                  |
| 82120499     | Granted | 6856514       | 10/27/2003  | 38398      | 10/694121 US       | US | TOOLLESS THUMB SCREW WITH ADJUSTABLE HEIGHT KNOB                                                                                  |
| 82121681     | Granted | 6738274       | 9/9/2002    | 38125      | 10/237843 US       | US | POWER SUPPLY WITH INTEGRATED BRIDGE AND BOOST CIRCUIT                                                                             |
| 82126928     | Granted | 5809280       | 10/13/1995  | 9/15/1998  | 08/542711 US       | US | ADAPTIVE AHEAD FIFO WITH LRU REPLACEMENT                                                                                          |
| 82128110     | Granted | 5793693       | 11/4/1996   | 8/11/1998  | 08/743501 US       | US | CACHE MEMORY USING UNIQUE BURST COUNTER CIRCUITRY AND ASYNCHRONOUS INTERLEAVED RAM BANKS FOR ZERO WAIT STATE OPERATION            |
| 82129613     | Granted | 5974567       | 6/20/1997   | 10/26/1999 | 08/879912 US       | US | GHOST PARTITION                                                                                                                   |

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| 82129736     | Granted | 5860142       | 12/27/1996  | 1/12/1999  | 08/775023          | US | METHOD AND APPARATUS FOR MAPPING THE MEMORY OF A COMPUTER FOR MAXIMIZING MEMORY USAGE                                                      |
| 82129925     | Granted | 5886872       | 4/23/1997   | 3/23/1999  | 08/839066          | US | PIVOTABLE SUPPORT AND HEAT SINK APPARATUS REMOVABLY CONNECTABLE WITHOUT TOOLS TO A COMPUTER PROCESSOR                                      |
| 82129928     | Granted | 5946189       | 10/5/1998   | 8/31/1999  | 09/167046          | US | PIVOTABLE SUPPORT AND HEAT SINK APPARATUS REMOVABLY CONNECTABLE WITHOUT TOOLS TO A COMPUTER PROCESSOR                                      |
| 82130861     | Granted | 6067585       | 5/14/1998   | 36669      | 09/078815          | US | AN ADAPTIVE INTERFACE CONTROLLER THAT CAN OPERATE WITH SEGMENTS OF DIFFERENT PROTOCOL AND TRANSMISSION RATES IN A SINGLE INTEGRATED DEVICE |
| 82130924     | Granted | 5951661       | 8/15/1997   | 9/14/1999  | 08/911248          | US | BUS PROTOCOL VIOLATION MONITOR SYSTEMS AND METHODS                                                                                         |
| 82131926     | Granted | 6792490       | 11/16/2001  | 9/14/2004  | 09/991058          | US | SYSTEM AND METHOD FOR HIDING PERIPHERAL DEVICES IN A COMPUTER SYSTEM                                                                       |
| 82132235     | Granted | 6717821       | 9/17/2002   | 4/6/2004   | 10/244876          | US | INTEGRATED CIRCUIT DEVICE/CIRCUIT BOARD CONNECTION APPARATUS                                                                               |
| 82132358     | Granted | 6832247       | 6/15/1998   | 12/14/2004 | 09/098027          | US | METHOD AND APPARATUS FOR AUTOMATIC MONITORING OF SIMPLE NETWORK MANAGEMENT PROTOCOL MANAGEABLE DEVICES                                     |
| 82132421     | Granted | 6449677       | 3/11/1999   | 9/10/2002  | 09/266356          | US | METHOD AND APPARATUS FOR MULTIPLEXING AND DEMULTIPLEXING ADDRESSES OF REGISTERED PERIPHERAL INTERCONNECT APPARATUS                         |
| 82132550     | Granted | 6742020       | 6/8/2000    | 5/25/2004  | 09/589778          | US | SYSTEM AND METHOD FOR MANAGING DATA FLOW AND MEASURING SERVICE IN A STORAGE NETWORK                                                        |
| 82133171     | Granted | 6189058       | 2/12/1999   | 2/13/2001  | 09/249032          | US | CROSSBAR CONNECT SWITCH MECHANISM FOR HOT PLUGABILITY                                                                                      |
| 82133174     | Granted | 6738882       | 11/30/1999  | 5/18/2004  | 09/451052          | US | CONCURRENT MULTI-PROCESSOR MEMORY TESTING BEYOND 32-BIT ADDRESSES                                                                          |
| 82133294     | Granted | 6654816       | 5/31/2000   | 11/25/2003 | 09/583671          | US | COMMUNICATION INTERFACE SYSTEMS FOR LOCALLY ANALYZING COMPUTERS                                                                            |
| 82133420     | Granted | 6754780       | 4/4/2000    | 6/22/2004  | 09/542969          | US | PROVIDING DATA IN RESPONSE TO A READ COMMAND THAT MAINTAINS CACHE LINE ALIGNMENT                                                           |
| 82134605     | Granted | 6212535       | 9/19/1996   | 4/3/2001   | 08/710696          | US | BROWSER-BASED ELECTRONIC MESSAGING                                                                                                         |
| 82134668     | Granted | 6101543       | 10/25/1996  | 8/8/2000   | 08/738155          | US | PSEUDO NETWORK ADAPTER FOR FRAME CAPTURE, ENCAPSULATION AND ENCRYPTION                                                                     |
| 82135103     | Granted | 6571324       | 6/26/1997   | 5/27/2003  | 08/883381          | US | WARMSWAP OF FAILED MEMORY MODULES AND DATA RECONSTRUCTION IN A MIRRORED WRITEBACK CACHE SYSTEM                                             |

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| 82135235     | Granted | 5920721       | 6/11/1997   | 7/6/1999   | 08/873147          | US | COMPIER GENERATING FUNCTIONALLY-ALIKE CODE SEQUENCE IN AN EXECUTABLE PROGRAM INTENDED FOR EXECUTION IN DIFFERENT RUN-TIME ENVIRONMENTS                                                           |
| 82135790     | Granted | 5953503       | 10/29/1997  | 9/14/1999  | 08/959594          | US | COMPRESSION PROTOCOL WITH MULTIPLE PRESET DICTIONARIES                                                                                                                                           |
| 82136108     | Granted | 5890959       | 3/31/1998   | 4/6/1999   | 09/052751          | US | HIGH EFFICIENCY BLOWER SYSTEM WITH INTEGRAL BACKFLOW PREVENTOR                                                                                                                                   |
| 82164950     | Granted | 5764996       | 11/27/1995  | 6/9/1998   | 08/563221          | US | A METHOD AND APPARATUS FOR OPTIMIZING PCI INTERRUPT BINDING AND ASSOCIATED LATENCY IN EXTENDED/BRIDGED PCI BUSES                                                                                 |
| 82165259     | Granted | 6108305       | 11/20/1998  | 8/22/2000  | 09/197137          | US | METHOD AND APPARATUS FOR RELATIVE ERROR SCHEDULING IN A COMMUNICATIONS NETWORK USING DISCRETE RATES AND PROPORTIONAL RATE SCALING                                                                |
| 82165325     | Granted | 5754860       | 7/23/1996   | 5/19/1998  | 08/685346          | US | METHOD AND APPARATUS FOR SOFTWARE TESTING USING DIFFERENTIAL TESTING TECHNIQUE TO TEST COMPIERS                                                                                                  |
| 82165949     | Granted | 6653869       | 2/15/2002   | 11/25/2003 | 10/077194          | US | UNIVERSAL CMOS SINGLE INPUT, LOW SWING SENSE AMPLIFIER WITHOUT REFERENCE VOLTAGE                                                                                                                 |
| 82166009     | Granted | 6738928       | 6/19/2000   | 5/18/2004  | 09/596460          | US | METHOD AND EXPERT SYSTEM FOR ANALYSIS OF CRASH DUMPS                                                                                                                                             |
| 82166261     | Granted | 6804813       | 11/3/2000   | 10/12/2004 | 09/706176          | US | SYSTEM AND METHOD FOR REMOTE AND LOCAL DIAGNOSIS USING AUTOMATICALLY IDENTIFIED SYMBOL LIBRARIES TO CREATE RECORD BASED REQUESTS WITH TAG LISTS OF DATA TO BE COLLECTED FROM AN OPERATING SYSTEM |
| 82166321     | Granted | 6801986       | 8/20/2001   | 10/5/2004  | 09/933536          | US | LIVELOCK PREVENTION BY DELAYING SURRENDER OF OWNERSHIP UPON INTERVENING OWNERSHIP REQUEST DURING LOAD LOCKED/STORE CONDITIONAL ATOMIC MEMORY OPERATION                                           |
| 82169255     | Granted | 7580814       | 3/23/2004   | 8/25/2009  | 10/807701          | US | Sequence Simulator                                                                                                                                                                               |
| 82169510     | Granted | 7578733       | 7/27/2004   | 8/25/2009  | 10/900862          | US | Enclosures With Redundant Fans In Doors With Interlocks                                                                                                                                          |
| 82169630     | Granted | 7446024       | 6/21/2005   | 11/4/2008  | 11/158760          | US | Method Of Forming Nanowires With A Narrow Diameter Distribution                                                                                                                                  |
| 82171007     | Granted | 7284168       | 1/26/2005   | 10/16/2007 | 11/043377          | US | Method And System For Testing Ram Redundant Integrated Circuits                                                                                                                                  |
| 82171253     | Granted | 7290169       | 4/6/2004    | 10/30/2007 | 10/818975          | US | Core-level Processor Lockstepping                                                                                                                                                                |
| 82173188     | Granted | 7472398       | 11/17/2003  | 12/30/2008 | 10/715250          | US | Method And System For Hosting An Application With A Facade Server                                                                                                                                |
| 82174310     | Granted | 6816378       | 4/28/2003   | 11/9/2004  | 10/425548          | US | Stack Up Assembly                                                                                                                                                                                |
| 82174313     | Granted | 6873530       | 7/13/2004   | 3/29/2005  | 10/890937          | US | Stack Up Assembly                                                                                                                                                                                |

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| 82174316     | Granted | 6862186       | 7/13/2004   | 3/1/2005   | 10/890626          | US | Stack Up Assembly                                                                                                       |
| 82177994     | Granted | 7321482       | 3/19/2004   | 1/22/2008  | 10/804624          | US | Sub-circuit Voltage Manipulation                                                                                        |
| 82178681     | Granted | 7273386       | 7/28/2004   | 9/25/2007  | 10/901338          | US | Pin Shroud                                                                                                              |
| 82179311     | Granted | 8038451       | 11/18/2005  | 10/18/2011 | 11/283199          | US | Multi-board Printed Circuit Assembly Having Aligned Connectors                                                          |
| 82179554     | Granted | 7280364       | 11/24/2004  | 10/9/2007  | 10/996722          | US | Apparatus And Method For Multiprocessor Circuit Board Testing A Receiver Connected To A Reference Voltage Signal        |
| 82180685     | Granted | 7299380       | 1/27/2004   | 11/20/2007 | 10/766200          | US |                                                                                                                         |
| 82181303     | Granted | 7412045       | 10/30/2003  | 8/12/2008  | 10/699365          | US | Telecommunications Service Program                                                                                      |
| 82183862     | Granted | 7409576       | 9/8/2004    | 8/5/2008   | 10/935941          | US | High-availability Cluster With Proactive Maintenance                                                                    |
| 82184237     | Granted | 7432742       | 3/22/2004   | 10/7/2008  | 10/805979          | US | System And Method For Detecting An Edge Of A Data Signal                                                                |
| 82184681     | Granted | 7411440       | 7/12/2005   | 8/12/2008  | 11/180096          | US | System Located In An Integrated Circuit For Reducing Calibration Components                                             |
| 82187675     | Granted | 7403204       | 8/23/2005   | 7/22/2008  | 11/209897          | US | Method And Apparatus For Managing Changes In A Virtual Screen Buffer                                                    |
| 82188296     | Granted | 7610526       | 1/24/2005   | 10/27/2009 | 11/041821          | US | On-chip Circuitry For Bus Validation                                                                                    |
| 82192109     | Granted | 7262964       | 4/27/2005   | 8/28/2007  | 11/115559          | US | Airflow Control Baffle                                                                                                  |
| 82196042     | Granted | 7402531       | 12/9/2005   | 7/22/2008  | 11/297900          | US | Method For Selectively Controlling Lengths Of Nanowires                                                                 |
| 82201658     | Granted | 6779187       | 2/7/2000    | 8/17/2004  | 09/499423          | US | METHOD AND SYSTEM FOR DYNAMIC INTERCEPTION OF FUNCTION CALLS TO DYNAMIC LINK LIBRARIES INTO A WINDOWED OPERATING SYSTEM |
| 82201907     | Granted | 7242199       | 4/21/2005   | 7/10/2007  | 11/112795          | US | Active Interconnects And Control Points In Integrated Circuits                                                          |
| 82203158     | Granted | 7251547       | 10/8/2004   | 7/31/2007  | 10/960574          | US | Correlation Of Vent Tile Settings And Rack Temperatures                                                                 |
| 82208279     | Granted | 7738681       | 11/1/2005   | 6/15/2010  | 11/264202          | US | Fingerprint And Physical Attribute Detection                                                                            |
| 82211270     | Granted | 8019871       | 7/27/2006   | 9/13/2011  | 11/494101          | US | Federation Of Grids Using Rings Of Trust                                                                                |
| 82216139     | Granted | 8060388       | 2/10/2006   | 11/15/2011 | 11/351955          | US | Resource Distribution                                                                                                   |
| 82216517     | Granted | 7525833       | 10/21/2005  | 4/28/2009  | 11/255722          | US | Nanoscale Shift Register And Signal Demultiplexing Using Microscale/nanoscale Shift Registers                           |
| 82226072     | Granted | 7817653       | 4/19/2007   | 10/19/2010 | 11/737360          | US | PRIORITY SELECTION CIRCUIT                                                                                              |
| 82240805     | Granted | 8043687       | 10/16/2008  | 10/25/2011 | 12/253158          | US | Structure Including A Graphene Layer And Method For Forming The Same                                                    |
| 82242488     | Granted | 7925927       | 10/30/2008  | 4/12/2011  | 12/262032          | US | Simulator For Determining Data Loss In A Fault Tolerant System                                                          |
| 82249355     | Granted | 8108557       | 1/22/2009   | 1/31/2012  | 12/357636          | US | System And Method For Measuring Clock Skew On A Network                                                                 |
| 82251356     | Granted | 7797530       | 4/9/2001    | 9/14/2010  | 10/276334          | US | Authentication And Encryption Method And Apparatus For A Wireless Local Access Network                                  |
| 82257851     | Granted | 6839706       | 8/6/2001    | 1/4/2005   | 09/682209          | US | Block Data Storage Within A Computer Network                                                                            |

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| 82265774     | Granted | 6751272       | 2/11/1998   | 6/15/2004  | 09/022069          | US | DYNAMIC ADJUSTMENT TO PRESERVE SIGNAL-TO-NOISE RATIO IN A QUADRATURE DETECTOR SYSTEM                                                        |
| 82266461     | Granted | 5771235       | 5/1/1996    | 6/23/1998  | 08/641619          | US | Scalable CSMA/CD Repeater                                                                                                                   |
| 82266524     | Granted | 5801602       | 4/30/1996   | 9/1/1998   | 08/641375          | US | Isolation And Signal Filter Transformer                                                                                                     |
| 82266776     | Granted | 5999535       | 5/28/1997   | 12/7/1999  | 08/864294          | US | SHORT CUT FORWARDING OF LOCAL CELLS-IN-FRAMES TRAFFIC WITHIN LOCAL-AREA-NETWORKS                                                            |
| 82267085     | Granted | 6147987       | 4/11/2000   | 11/14/2000 | 08/835758          | US | Supporting Load Sharing Across Multiple Network Access Servers                                                                              |
| 82267151     | Granted | 6032232       | 5/29/1997   | 2/29/2000  | 08/865243          | US | Multiported Memory Access System With Arbitration And Source Burst Limiter For Blocking A Memory Access Request                             |
| 82267397     | Granted | 6058110       | 5/13/1997   | 5/2/2000   | 08/855051          | US | Bypassing Telephone Network With Dual Band Modem                                                                                            |
| 82267649     | Granted | 6145109       | 12/12/1997  | 11/7/2000  | 08/989616          | US | Forward Error Correction System For Packet Based Real Time Media                                                                            |
| 82268147     | Granted | 6577642       | 1/15/1999   | 6/10/2003  | 09/232762          | US | METHOD AND SYSTEM FOR VIRTUAL NETWORK ADMINISTRATION WITH A DATA-OVER CABLE SYSTEM                                                          |
| 82268585     | Granted | 6959082       | 7/10/2001   | 10/25/2005 | 09/902213          | US | Method And System For Automatic Gain Control With Adaptive Table Lookup                                                                     |
| 82268834     | Granted | 6112258       | 3/19/1998   | 8/29/2000  | 09/044291          | US | MULTI-CYCLE I/O ASIC COMMUNICATION SYSTEM HAVING AN ARBITER CIRCUIT CAPABLE FOR UPDATING ADDRESS TABLE ASSOCIATED WITH EACH I/O ASIC ON BUS |
| 82268837     | Granted | 6226292       | 3/19/1998   | 5/1/2001   | 09/044285          | US | FRAME REPLICATION IN A NETWORK SWITCH FOR MULTI-PORT FRAME FORWARDING                                                                       |
| 82269272     | Granted | 6151213       | 5/12/1999   | 11/21/2000 | 09/310868          | US | Ventilation And Cooling Control System For Modular Platforms                                                                                |
| 82269395     | Granted | 6032218       | 5/28/1998   | 2/29/2000  | 09/086241          | US | CONFIGURABLE WEIGHTED ROUND ROBIN ARBITER                                                                                                   |
| 82269833     | Granted | 6654461       | 9/14/1999   | 11/25/2003 | 09/395633          | US | Synthesized Telephone Line Ring Signal Impedance Termination                                                                                |
| 82269893     | Granted | 6275933       | 4/30/1999   | 8/14/2001  | 09/303341          | US | Security System For A Computerized Apparatus                                                                                                |
| 82269956     | Granted | 6757276       | 11/24/1998  | 6/29/2004  | 09/198827          | US | Touch Tone Replacement for Internet Telephony                                                                                               |
| 82270334     | Granted | 6724889       | 11/1/1999   | 4/20/2004  | 09/431416          | US | Method And System For Line Status Indicators Using Line Side Power                                                                          |
| 82270580     | Granted | 6934740       | 9/19/2000   | 8/23/2005  | 09/664667          | US | Method and apparatus for sharing common data objects among multiple applications in a client device                                         |
| 82270586     | Granted | 6807182       | 1/31/2000   | 10/19/2004 | 09/494399          | US | Stacked Network Devices Including A Protocol Engine And Distributed Trunk Ports And Method Of Operating Same                                |
| 82270706     | Granted | 6751230       | 5/24/1999   | 6/15/2004  | 09/317775          | US | UPSTREAM CHANNEL MULTICAST MEDIA ACCESS CONTROL (MAC) ADDRESS METHOD FOR DATA-OVER-CABLE SYSTEMS                                            |

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| 82270709     | Granted | 6707799       | 5/27/1999   | 3/16/2004  | 09/321314          | US | DYNAMIC CONTROL PROTOCOL FOR FRAME RELAY FRAGMENTATION IN SUPPORT OF REAL-TIME APPLICATIONS SUCH AS VOIP AND VOFR               |
| 82270772     | Granted | 6643289       | 12/29/1999  | 11/4/2003  | 09/474687          | US | Method Of MPOA Status Change Notification                                                                                       |
| 82271207     | Granted | 6804224       | 2/29/2000   | 10/12/2004 | 09/515365          | US | System and Method for Providing Telephone Service Having Private Branch Exchange Features in a Voice-Over-Data Telephony System |
| 82271267     | Granted | 6804262       | 4/28/2000   | 10/12/2004 | 09/560087          | US | Method and Apparatus for Channel Determination Through Power Measurements                                                       |
| 82271273     | Granted | 6633565       | 6/29/1999   | 10/14/2003 | 09/342465          | US | Apparatus For And Method Of Flow Switching In A Data Communications Network                                                     |
| 82271831     | Granted | 6732281       | 5/31/2000   | 5/4/2004   | 09/583833          | US | System And Method For Loading Data Onto Carriers                                                                                |
| 82271834     | Granted | 7222255       | 2/28/2001   | 5/22/2007  | 09/795730          | US | System and Method For Network Performance Testing                                                                               |
| 82271954     | Granted | 6628754       | 1/5/2001    | 9/30/2003  | 09/755927          | US | METHOD FOR RAPID NOISE REDUCTION FROM AN ASYMMETRIC DIGITAL SUBSCRIBER LINE MODEM                                               |
| 82271957     | Granted | 6765989       | 8/21/2000   | 7/20/2004  | 09/643069          | US | METHOD FOR OPTIMIZING DOWNSTREAM DATA TRANSFER IN AN ASYMMETRIC DIGITAL SUBSCRIBER LINE MODEM                                   |
| 82272080     | Granted | 6700895       | 3/15/2000   | 3/2/2004   | 09/526649          | US | Method and System for Computationally Efficient Calculation of Frame Loss Rates Over an Array of Virtual Buffers                |
| 82272146     | Granted | 6801527       | 5/1/2000    | 10/5/2004  | 09/562131          | US | STACKABLE NETWORK UNIT INCLUDING REGISTERSFOR IDENTIFYING STACK MEMBERS AND TRUNK PORTS                                         |
| 82272209     | Granted | 6674794       | 2/4/2000    | 1/6/2004   | 09/498328          | US | System and method for sampling phase adjustment by an analog modem                                                              |
| 82272767     | Granted | 6694360       | 6/9/2000    | 2/17/2004  | 09/591568          | US | Multi-Mode Network Interface Having Loadable Software Images                                                                    |
| 82272956     | Granted | 6754310       | 3/8/2001    | 6/22/2004  | 09/801953          | US | Telephony Interface Device For Providing Diagnostic Information To A Telephone                                                  |
| 82273205     | Granted | 6674844       | 6/18/2001   | 1/6/2004   | 09/883892          | US | SYSTEM FOR PROVIDING MODEM ACCESS VIA AN IR INTERFACE IN A PBX                                                                  |
| 82273268     | Granted | 6963541       | 2/27/2001   | 11/8/2005  | 09/796585          | US | UPSTREAM TRANSMISSION PROFILES FOR A DOCSIS OR DOCSIS-LIKE SYSTEM                                                               |
| 82273331     | Granted | 6633230       | 7/2/2001    | 10/14/2003 | 09/897266          | US | Apparatus and Method for Providing Improved Stress Thresholds in Network Management Systems                                     |
| 82273517     | Granted | 7289449       | 8/6/2001    | 10/30/2007 | 09/923848          | US | DEVICE AND METHOD FOR MANAGING FAULT DETECTION AND FAULT ISOLATION IN VOICE AND DATA NETWORKS                                   |
| 82273769     | Granted | 7096274       | 2/12/2002   | 8/22/2006  | 10/074803          | US | Optimum Frame Size Predictor For Wireless Local Area Network                                                                    |
| 82273889     | Granted | 6674652       | 1/29/2002   | 1/6/2004   | 10/060429          | US | INTEGRATED SHIELD WRAP                                                                                                          |

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| 82275269     | Granted | 5926226       | 8/9/1996    | 7/20/1999  | 08/694949          | US | A METHOD FOR ADJUSTING THE QUALITY OF A VIDEO CODE     |
| 82275332     | Granted | 5943338       | 8/19/1996   | 8/24/1999  | 08/699564          | US | REDUNDANT ATM INTERCONNECT MECHANISM                   |
| 82275455     | Granted | 5845243       | 2/3/1997    | 12/1/1998  | 08/794121          | US | METHOD AND APPARATUS FOR WAVELET BASED DATA            |
|              |         |               |             |            |                    |    | COMPRESSION HAVING ADAPTIVE BIT RATE CONTROL FOR       |
|              |         |               |             |            |                    |    | COMPRESSION OF AUDIO INFORMATION                       |
| 82578786     | Granted | 6677831       | 1/31/2001   | 1/13/2004  | 09/773111          | US | Differential Impedance Control on Printed Circuit      |
| 82947636     | Granted | 7308451       | 12/14/2001  | 12/11/2007 | 10/017504          | US | METHOD AND SYSTEM FOR GUIDED CLUSTER BASED             |
|              |         |               |             |            |                    |    | PROCESSING PROTOTYPES                                  |
| 82020857     | Granted | 5841777       | 8/30/1996   | 11/24/1998 | 08/707812          | US | SYSTEM AND METHOD FOR ACCOMMODATING ABR AND CBR        |
|              |         |               |             |            |                    |    | TRAFFIC ON A SHARED COMMUNICATIONS CHANNEL             |
| 82027037     | Granted | 6275350       | 4/3/1998    | 8/14/2001  | 09/054648          | US | Magnetic Head And Method For Compensating For Magnetic |
|              |         |               |             |            |                    |    | Tape Dimensional Instability                           |
| 82045139     | Granted | 6175865       | 11/12/1998  | 1/16/2001  | 09/190695          | US | Apparatus For Automatically Configuring Network Media  |
|              |         |               |             |            |                    |    | Connections                                            |
| 82068803     | Granted | 6811080       | 2/25/2000   | 11/2/2004  | 09/937020          | US | Intelligent Media Reader And Label Printer             |
| 81967103     | Granted | 7039638       | 4/27/2001   | 5/2/2006   | 09/844730          | US | Distributed clustering system and method               |
| 81988013     | Granted | 7221474       | 7/27/2001   | 5/22/2007  | 09/917393          | US | METHOD FOR VISUALIZING LARGE VOLUMES OF MULTIPLE-      |
|              |         |               |             |            |                    |    | ATTRIBUTE DATA WITHOUT AGGREGATION USING A PIXEL       |
|              |         |               |             |            |                    |    | BAR CHART                                              |
| 81996068     | Granted | 6845380       | 3/4/2002    | 1/18/2005  | 10/092094          | US | METHOD AND SYSTEM OF VALUING TRANSFORMATION            |
|              |         |               |             |            |                    |    | BETWEEN EXTENSIBLE MARKUP LANGUAGE (XML)               |
|              |         |               |             |            |                    |    | DOCUMENTS                                              |
| 81999317     | Granted | 7350206       | 11/5/2001   | 3/25/2008  | 10/011378          | US | Method To Reduce Provisioning Time In Shared Storage   |
|              |         |               |             |            |                    |    | Systems By Preemptive Copying Of Images                |
|              |         |               |             |            |                    |    | Investigating Business Processes                       |
| 82006556     | Granted | 7610211       | 6/21/2002   | 10/27/2009 | 10/177273          | US | IMPROVING BUSINESS PROCESSES BASED ON A PREDICTIVE     |
|              |         |               |             |            |                    |    | MODEL                                                  |
| 82006559     | Granted | 7565304       | 6/21/2002   | 7/21/2009  | 10/176505          | US | Dynamic Prioritization Of Activities                   |
|              |         |               |             |            |                    |    | Resource Allocation In Data Centers Using Models       |
| 82006562     | Granted | 7822658       | 6/4/2002    | 10/26/2010 | 10/164194          | US | Method And System For Finding Conjective Clusters      |
| 82085411     | Granted | 7743127       | 10/10/2002  | 6/22/2010  | 10/269896          | US | Feature Selection For Two-class Classification Systems |
| 82086413     | Granted | 7739313       | 5/30/2003   | 6/15/2010  | 10/448899          | US | METHOD AND APPARATUS FOR IDENTIFYING AN OBJECT         |
| 82091654     | Granted | 7415445       | 9/24/2002   | 8/19/2008  | 10/253041          | US | USING AN OBJECT DESCRIPTION LANGUAGE                   |
| 82098899     | Granted | 7426525       | 8/8/2003    | 9/16/2008  | 10/637308          | US | SYSTEM AND METHOD FOR ALLOCATING SERVER RESOURCES      |
|              |         |               |             |            |                    |    |                                                        |
| 82102208     | Granted | 7581008       | 11/12/2003  | 8/25/2009  | 10/706401          | US | System And Method For Developing A Star Schema         |
|              |         |               |             |            |                    |    | Loading Data From A Vertical Database Table Into A     |
| 82179935     | Granted | 8412671       | 8/13/2004   | 4/2/2013   | 10/918587          | US | Horizontal Database Table                              |
| 82183301     | Granted | 7761455       | 3/31/2004   | 7/20/2010  | 10/814715          | US | System And Method For Category Discovery               |
| 82194227     | Granted | 7325005       | 7/30/2004   | 1/29/2008  | 10/902924          | US |                                                        |

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| 82206341     | Granted     | 7716227       | 11/3/2005   | 5/11/2010  | 11/266162          | US | Visually Representing Series Data Sets In Accordance With Importance Values                                                                                                                         |
| 82206401     | Granted     | 7505868       | 4/29/2005   | 3/17/2009  | 11/117989          | US | Performing Quality Determination Of Data                                                                                                                                                            |
| 82208900     | Application |               | 11/10/2005  |            | 11/272211          | US | System And Method For Data Prediction                                                                                                                                                               |
| 82212083     | Granted     | 8359190       | 10/27/2006  | 1/22/2013  | 11/588690          | US | Identifying Semantic Positions Of Portions Of A Text                                                                                                                                                |
| 82212086     | Granted     | 7555427       | 1/31/2007   | 6/30/2009  | 11/700430          | US | Providing A Topic List                                                                                                                                                                              |
| 82214204     | Application |               | 3/27/2006   |            | 11/389844          | US | Systems And Methods For Designing Business Services                                                                                                                                                 |
| 82216142     | Granted     | 7818272       | 7/31/2006   | 10/19/2010 | 11/496807          | US | METHOD FOR DISCOVERY OF CLUSTERS OF OBJECTS IN AN ARBITRARY UNDIRECTED GRAPH USING A DIFFERENCE BETWEEN A FRACTION OF INTERNAL CONNECTIONS AND MAXIMUM FRACTION OF CONNECTIONS BY AN OUTSIDE OBJECT |
| 82220699     | Granted     | 8209695       | 7/28/2006   | 6/26/2012  | 11/495357          | US | Reserving Resources In A Resource-on-demand System For User Desktop Utility Demand                                                                                                                  |
| 82222133     | Granted     | 7761444       | 10/5/2006   | 7/20/2010  | 11/543494          | US | Identifying A Sequence Of Blocks Of Data To Retrieve Based On A Query                                                                                                                               |
| 82222946     | Granted     | 8799041       | 10/31/2006  | 8/5/2014   | 11/590110          | US | Calculating An Amount Of Enterprise Resource To Be Assigned Based On Received Parameters                                                                                                            |
| 82226690     | Granted     | 8141090       | 4/24/2007   | 3/20/2012  | 11/789411          | US | Automated Model-based Provisioning Of Resources                                                                                                                                                     |
| 82226693     | Granted     | 8065676       | 4/24/2007   | 11/22/2011 | 11/789412          | US | Automated Provisioning Of Virtual Machines For A Virtual Machine Buffer Pool And Production Pool                                                                                                    |
| 82228820     | Granted     | 7921410       | 4/9/2007    | 4/5/2011   | 11/784611          | US | ANALYZING AND APPLICATION OR SERVICE LATENCY                                                                                                                                                        |
| 82229441     | Granted     | 7840556       | 7/31/2007   | 11/23/2010 | 11/831902          | US | Managing Performance Of A Database Query                                                                                                                                                            |
| 82233563     | Granted     | 8108409       | 7/19/2007   | 1/31/2012  | 11/880390          | US | Determining Top Combinations of Items To Present To A User (as amended)                                                                                                                             |
| 82234994     | Granted     | 7761466       | 7/30/2007   | 7/20/2010  | 11/830841          | US | Hash-based Image Identification                                                                                                                                                                     |
| 82235246     | Granted     | 8224739       | 7/30/2007   | 7/17/2012  | 11/830606          | US | Allocating Goods To Bidders In Combinatorial Auctions                                                                                                                                               |
| 82242305     | Published   |               | 5/16/2008   |            | 12/988368          | US | Provisioning A Geographical Image For Retrieval                                                                                                                                                     |
| 82243052     | Published   |               | 9/30/2008   |            | 12/242637          | US | Managing Execution Of Database Queries                                                                                                                                                              |
| 82247360     | Granted     | 8212817       | 10/31/2008  | 7/3/2012   | 12/290616          | US | Spatial Temporal Visual Analysis Of Thermal Data                                                                                                                                                    |
| 82248233     | Granted     | 8904381       | 1/23/2009   | 12/2/2014  | 12/358995          | US | User Defined Data Partitioning (UDP) - Grouping of Data Based on Computation Model                                                                                                                  |
| 82248479     | Granted     | 8122066       | 10/14/2008  | 2/21/2012  | 12/251320          | US | Database Query Profiler                                                                                                                                                                             |
| 82248482     | Granted     | 8180693       | 10/31/2008  | 5/15/2012  | 12/262519          | US | PREDICTION OF FINANCIAL PERFORMANCE FOR A GIVEN PORTFOLIO OF MARKETING INVESTMENTS                                                                                                                  |
| 82248485     | Granted     | 8027897       | 10/31/2008  | 9/27/2011  | 12/262533          | US | A System And Method For Optimizing Financial Performance Generated By Marketing Investments Under Budget Constraints                                                                                |
| 82249604     | Published   |               | 4/30/2009   |            | 12/432951          | US | Modeling Multi Dimensional Sequence Data Over Streams                                                                                                                                               |
| 82249607     | Published   |               | 2/6/2009    |            | 12/367200          | US | System And Method For Generating A User Profile                                                                                                                                                     |

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| 82249610     | Granted   | 8643646       | 3/16/2009   | 2/4/2014   | 12/381716          | US | Constructing A Cell-based Cluster Of Data Records Of A Scatter Plot                                                                                                             |
| 82250417     | Granted   | 8117220       | 4/30/2009   | 2/14/2012  | 12/433791          | US | Artificial Record Added To A Database                                                                                                                                           |
| 82258094     | Granted   | 8954893       | 11/6/2009   | 2/10/2015  | 12/614193          | US | Visually Representing A Hierarchy Of Category Nodes                                                                                                                             |
| 82258097     | Granted   | 8725660       | 7/30/2009   | 5/13/2014  | 12/512243          | US | Applying Non-linear Transformation Of Feature Values For Training A Classifier                                                                                                  |
| 82258100     | Published |               | 7/31/2009   |            | 12/533763          | US | Method And System For Providing Website Content                                                                                                                                 |
| 82258343     | Granted   | 8112408       | 7/28/2009   | 2/7/2012   | 12/510933          | US | System And Method For Generating A User Defined Function Using A Shell                                                                                                          |
| 82258469     | Granted   | 8898209       | 7/12/2009   | 11/25/2014 | 12/501446          | US | Compression Of Non Dyadic Sensor Data Organized Within A Non Dyadic Hierarchy                                                                                                   |
| 82258532     | Published |               | 7/19/2009   |            | 12/505503          | US | Execution Of Query Plans For Database Query Within Environments Of Databases                                                                                                    |
| 82258535     | Granted   | 8099399       | 7/27/2009   | 1/17/2012  | 12/509704          | US | Determining Whether Change In Workload Of Database System Has Occurred, And/or Whether Executing Current Workload Will Likely Result In Problem Developing With Database System |
|              |           |               |             |            |                    |    |                                                                                                                                                                                 |
| 82259594     | Granted   | 8311957       | 11/13/2009  | 11/13/2012 | 12/618181          | US | Method And System For Developing A Classification Tool                                                                                                                          |
| 82261280     | Granted   | 8452717       | 4/27/2010   | 5/28/2013  | 12/768169          | US | Presenting An Interactive Guidance Structure In A Collaborative Environment                                                                                                     |
| 82261283     | Published |               | 4/27/2010   |            | 12/768178          | US | Template-based Technique For Making A Best Practices Framework Actionable                                                                                                       |
| 82263338     | Granted   | 8954451       | 6/30/2010   | 2/10/2015  | 12/828240          | US | Selecting Microblog Entries Based On Web Pages, Via Path Similarity Within Hierarchy Of Categories                                                                              |
| 82263593     | Granted   | 8549004       | 9/30/2010   | 10/1/2013  | 12/895683          | US | ESTIMATION OF UNIQUE DATABASE VALUES                                                                                                                                            |
| 82263650     | Granted   | 9087142       | 10/30/2010  | 7/21/2015  | 12/916501          | US | DETERMINING A SIMILARITY BETWEEN TREE RELATED STRUCTURES                                                                                                                        |
|              |           |               |             |            |                    |    |                                                                                                                                                                                 |
| 82265336     | Published |               | 3/31/2011   |            | 13/077932          | US | Optimizing workforce capacity and capability                                                                                                                                    |
| 82275887     | Granted   | 8725781       | 1/30/2011   | 5/13/2014  | 13/017013          | US | SENTIMENT CUBE                                                                                                                                                                  |
| 82275890     | Granted   | 8949211       | 1/31/2011   | 2/3/2015   | 13/018412          | US | OBJECTIVE-FUNCTION BASED SENTIMENT                                                                                                                                              |
| 82613061     | Published |               | 6/30/2011   |            | 13/173643          | US | Method and System of Extracting Concepts and Relationships From Texts                                                                                                           |
| 82690147     | Published |               | 10/31/2011  |            | 13/285825          | US | System and Method for Event Detection and Correlation from Moving Object Sensor Data                                                                                            |
| 82775156     | Published |               | 10/15/2011  |            | 13/274315          | US | OPTIMIZER                                                                                                                                                                       |
| 82819627     | Published |               | 10/20/2011  |            | 13/277322          | US | ESTIMATING A USER'S INTEREST IN AN ITEM                                                                                                                                         |
|              |           |               |             |            |                    |    |                                                                                                                                                                                 |
| 82850178     | Granted   | 9064245       | 2/22/2012   | 6/23/2015  | 13/402229          | US | GENERATING A CALENDAR GRAPHICAL VISUALIZATION INCLUDING PIXELS REPRESENTING DATA RECORDS CONTAINING USER FEEDBACK                                                               |

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| 82850198     | Published   |               | 4/30/2012   |            | 13/459362          | US | Managing Memory                                                                                      |
| 82850218     | Published   |               | 2/27/2012   |            | 13/406142          | US | DETERMINING DISTANCE BETWEEN DATA SEQUENCES                                                          |
| 82852903     | Granted     | 8868973       | 7/2/2009    | 10/21/2014 | 13/379135          | US | AUTOMATING DIAGNOSES OF COMPUTER-RELATED INCIDENTS                                                   |
| 82929153     | Published   |               | 3/16/2012   |            | 13/422139          | US | An algorithms for extracting acronym-definition pairs with high recall rate using relevance feedback |
| 82929199     | Published   |               | 3/12/2012   |            | 13/418055          | US | Page-Feed - A New Paradigm of Query Engines Collaboration                                            |
| 82965495     | Published   |               | 4/24/2012   |            | 13/454420          | US | Multi-Engine Executable Data-Flow Editor and Translator                                              |
| 83010733     | Granted     | 9053439       | 9/28/2012   | 6/9/2015   | 13/631480          | US | PREDICTING NEAR-FUTURE PHOTOVOLTAIC GENERATION                                                       |
| 83013810     | Granted     | 8972242       | 7/31/2012   | 3/3/2015   | 13/563647          | US | VISUAL ANALYSIS OF PHRASE EXTRACTION FROM A CONTENT STREAM                                           |
| 83108377     | Published   |               | 11/27/2012  |            | 13/686297          | US | CAUSAL TOPIC MINER                                                                                   |
| 83138908     | Published   |               | 1/31/2013   |            | 13/756221          | US | CLUSTERING SIGNIFIERS IN A SEMANTICS GRAPH                                                           |
| 83139094     | Granted     | 9063802       | 1/31/2013   | 6/23/2015  | 13/756126          | US | EVENT DETERMINATION                                                                                  |
| 83139117     | Published   |               | 3/9/2013    |            | 13/791911          | US | REWARD POPULATION GROUPING                                                                           |
| 83148414     | Published   |               | 1/8/2013    |            | 13/736258          | US | TEXT DETECTION IN IMAGES OF GRAPHICAL USER INTERFACES                                                |
| 83204627     | Published   |               | 4/25/2013   |            | 13/870267          | US | GENERATING A SUMMARY BASED ON READABILITY                                                            |
| 83204664     | Published   |               | 6/21/2013   |            | 13/923500          | US | COMPUTING A MOMENT FOR CATEGORIZING A DOCUMENT                                                       |
| 83209144     | Published   |               | 3/15/2013   |            | 13/842318          | US | UPDATING ROAD MAPS                                                                                   |
| 83209685     | Published   |               | 4/5/2013    |            | 13/857885          | US | RECOVERING A FAILURE IN A DATA PROCESSING SYSTEM                                                     |
| 83209805     | Published   |               | 3/28/2013   |            | 13/852882          | US | SYNONYM DETERMINATION AMONG N-GRAMS                                                                  |
| 83209871     | Published   |               | 5/17/2013   |            | 13/896795          | US | CONVERTING A HYBRID FLOW                                                                             |
| 83267830     | Published   |               | 7/31/2013   |            | 13/955961          | US | VISUAL ANALYTICS OF TEMPORAL-SPATIAL RELATIONSHIPS USING A HIERARCHICAL PIXEL CALENDAR TREE          |
| 83271740     | Published   |               | 6/20/2013   |            | 13/922554          | US | CONVERTING AN INPUT SCRIPT                                                                           |
| 83713442     | Published   |               | 10/28/2013  |            | 14/065101          | US | CLUSTERING AND ANALYSIS OF ELECTRONIC MEDICAL RECORDS                                                |
| 83818059     | Published   |               | 2/26/2014   |            | 14/191420          | US | PIXEL-BASED VISUALIZATIONS OF TIME SERIES DATA USING HELICES                                         |
| 83933622     | Published   |               | 10/31/2011  |            | 14/354802          | US | EMAIL TAGS                                                                                           |
| 84014641     | Application |               | 8/5/2014    |            | 14/452135          | US | SOCIAL ACTION AND SOCIAL TIE PREDICTION                                                              |
| 84078900     | Published   |               | 6/8/2012    |            | 14/397636          | US | PATIENT INFORMATION INTERFACE                                                                        |
| 84273647     | Application |               | 12/7/2012   |            | 14/648950          | US | CREATING MULTIMODAL OBJECTS OF USER RESPONSES TO MEDIA                                               |
| 90016894     | Application |               | 8/3/2015    |            | 29/535083          | US | A DISPLAY SCREEN FOR DISPLAYING COLLABORATIVE RESOURCES ON A COMPUTING DEVICE                        |
| 82063619     | Granted     | 7437568       | 8/16/2001   | 10/14/2008 | 09/931526          | US | Apparatus And Method For Establishing Trust                                                          |

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| 82069802     | Granted     | 7096204       | 10/6/2000   | 8/22/2006  | 10/110280          | US | Electronic Commerce System                                                                                                    |
| 82097522     | Granted     | 8069450       | 1/26/2004   | 11/29/2011 | 10/765827          | US | Computer Operating System Data Management                                                                                     |
| 82105889     | Granted     | 7594006       | 4/27/2004   | 9/22/2009  | 10/833379          | US | Trending Method And Apparatus For Resource Demand                                                                             |
| 82169195     | Granted     | 7437758       | 10/31/2003  | 10/14/2008 | 10/697044          | US | Computing Utility                                                                                                             |
| 82174130     | Granted     | 7383306       | 7/31/2003   | 6/3/2008   | 10/632402          | US | Propagation Of Viruses Through An Information Technology Network                                                              |
| 82176872     | Granted     | 8689000       | 5/21/2004   | 4/1/2014   | 10/557953          | US | System And Method For Selectively Increasing Message Transaction Costs                                                        |
| 82191731     | Granted     | 8589679       | 7/14/2005   | 11/19/2013 | 11/182527          | US | Use Of Certified Secrets In Communication                                                                                     |
| 82203719     | Granted     | 8274912       | 8/3/2005    | 9/25/2012  | 11/575397          | US | Identifier-based Signryption With Two Trusted Authorities                                                                     |
| 82203842     | Granted     | 8544002       | 10/28/2005  | 9/24/2013  | 11/718196          | US | Mapping Discovery For Virtual Network                                                                                         |
| 82204028     | Granted     | 7685125       | 10/6/2005   | 3/23/2010  | 11/664466          | US | Virtual Computing Infrastructure                                                                                              |
| 82208216     | Granted     | 8161558       | 4/25/2006   | 4/17/2012  | 11/411685          | US | Proving Relationships Between Data                                                                                            |
| 82232876     | Granted     | 8504733       | 7/31/2007   | 8/6/2013   | 11/831782          | US | Network Management And Administration                                                                                         |
| 82251419     | Granted     | 9026803       | 11/30/2009  | 5/5/2015   | 12/627500          | US | Subtree For An Aggregation System                                                                                             |
| 82631733     | Allowed     |               | 8/4/2009    |            | 13/057511          | US | Computing Entities, Platforms And Methods Operable To Perform Operations Selectively Using Different Cryptographic Algorithms |
| 83138407     | Published   |               | 1/31/2013   |            | 13/755195          | US | END-TO-END NETWORK ACCESS ANALYSIS                                                                                            |
| 83969769     | Published   |               | 2/22/2012   |            | 14/371610          | US | SECURITY THREAT ANALYSIS                                                                                                      |
| 84255642     | Application |               | 5/15/2015   |            | 14/713617          | US | COMPUTER INFRASTRUCTURE SECURITY MANAGEMENT                                                                                   |
| 82136540     | Granted     | 6226630       | 7/22/1998   | 5/1/2001   | 09/120780          | US | DATA MANAGER                                                                                                                  |
| 82173314     | Granted     | 7275068       | 12/19/2003  | 9/25/2007  | 10/741247          | US | METHOD AND APPARATUS FOR FILTERING INCOMING INFORMATION USING A SEARCH ENGINE AND STORED QUERIES DEFINING USER FOLDERS        |
| 82219511     | Granted     | 7711657       | 6/26/2006   | 40302      | 11/476305          | US | Discovering Communities-of-practice                                                                                           |
| 82263464     | Granted     | 8332392       | 6/30/2010   | 12/11/2012 | 12/827152          | US | RESOURCE-RESERVATION PRICING STRUCTURES BASED ON EXPECTED ABILITY TO DELIVER                                                  |
| 82919355     | Published   |               | 8/11/2009   |            | 13/384705          | US | SELECTION OF ITEMS FROM A FEED OF INFORMATION                                                                                 |
| 83930064     | Published   |               | 12/20/2011  |            | 14/352359          | US | Online Search Based On Geography Tagged Recommendations                                                                       |
| 84173799     | Published   |               | 9/28/2012   |            | 14/431218          | US | ENABLING COLLABORATIVE REACTIONS TO IMAGES                                                                                    |
| 84200978     | Application |               | 9/27/2012   |            | 14/431209          | US | LOCATION BASED ADVERTISING                                                                                                    |
| 81972035     | Granted     | 6865634       | 10/16/2003  | 3/8/2005   | 10/685416          | US | SHARING CONTENT BETWEEN COLLOCATED MOBILE DEVICES IN AN AD-HOC PRIVATE SOCIAL GROUP                                           |
| 81972038     | Granted     | 6651193       | 4/29/2000   | 11/18/2003 | 09/562589          | US | METHOD AND APPARATUS FOR DEADLOCK PREVENTION IN A DISTRIBUTED SHARED MEMORY SYSTEM                                            |
|              |             |               |             |            |                    |    | Method For Allowing Distributed High Performance Coherent Memory With Full Error Containment                                  |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------|
| 81999689     | Granted   | 6662277       | 7/31/2001   | 12/9/2003  | 09/919309          | US | Cache System With Groups Of Lines And With Coherence Of Both Single Lines And Groups Of Lines                                 |
| 82000877     | Granted   | 6735673       | 1/10/2002   | 5/11/2004  | 10/043789          | US | Apparatus And Methods For Cache Line Compression                                                                              |
| 82006994     | Granted   | 6874070       | 2/22/2002   | 3/29/2005  | 10/080440          | US | System And Method For Memory Interleaving Using Cell Address                                                                  |
| 82017356     | Granted   | 5689634       | 9/23/1996   | 11/18/1997 | 08/717646          | US | With Entry Grouping For Higher-Way Interleaving<br>THREE PURPOSE SHADOW REGISTER ATTACHED TO THE<br>OUTPUT OF STORAGE DEVICES |
| 82019042     | Granted   | 5893161       | 11/12/1996  | 36256      | 08/747321          | US | METHOD FOR ALLOCATING OWNERSHIP OF PORTIONS OF MEMORY IN A COHERENT MEMORY SYSTEM                                             |
| 82024850     | Granted   | 5815432       | 7/10/1997   | 36067      | 08/891173          | US | SINGLE-ENDED READ, DUAL-ENDED WRITE SCRAM CELL                                                                                |
| 82103267     | Granted   | 7107493       | 1/21/2003   | 9/12/2006  | 10/348228          | US | System And Method For Testing For Memory Errors In A Computer System                                                          |
| 82106387     | Granted   | 8661289       | 2/17/2006   | 2/25/2014  | 11/356559          | US | Systems And Methods For CPU Repair                                                                                            |
| 82117499     | Granted   | 6711703       | 9/28/2001   | 3/23/2004  | 09/966891          | US | Hard/soft Error Detection                                                                                                     |
| 82117691     | Granted   | 6662265       | 8/31/2000   | 12/9/2003  | 09/652704          | US | MECHANISM TO TRACK ALL OPEN PAGES IN A DRAM MEMORY SYSTEM                                                                     |
| 82122059     | Granted   | 7035953       | 6/25/2002   | 4/25/2006  | 10/179001          | US | Computer System Architecture With Hot Pluggable Main Memory Boards                                                            |
| 82126988     | Granted   | 5774680       | 12/11/1995  | 35976      | 08/570394          | US | INTERFACING DIRECT MEMORY ACCESS DEVICES TO A NON-ISA BUS                                                                     |
| 82126991     | Granted   | 6088517       | 10/14/1997  | 36718      | 08/950297          | US | INTERFACING DIRECT MEMORY ACCESS DEVICES TO NON-ISA BUS                                                                       |
| 82129922     | Granted   | 5940627       | 3/13/1997   | 8/17/1999  | 08/816350          | US | USER SELECTABLE FEATURE SET FOR A FLASH ROM BASED PERIPHERAL                                                                  |
| 82131362     | Granted   | 6167532       | 2/5/1998    | 12/26/2000 | 09/019178          | US | AUTOMATIC SYSTEM RECOVERY                                                                                                     |
| 82131551     | Granted   | 6249847       | 8/14/1998   | 6/19/2001  | 09/134057          | US | COMPUTER SYSTEM WITH SYNCHRONOUS MEMORY ARBITER THAT PERMITS ASYNCHRONOUS MEMORY REQUESTS                                     |
| 82173062     | Granted   | 7694174       | 2/17/2006   | 4/6/2010   | 11/357386          | US | Systems And Methods For CPU Repair                                                                                            |
| 82176623     | Granted   | 7353336       | 3/9/2005    | 39539      | 11/075897          | US | External Raid-enabling Cache                                                                                                  |
| 82179929     | Granted   | 8145847       | 1/20/2004   | 3/27/2012  | 10/760640          | US | Cache Coherency Protocol With Ordering Points                                                                                 |
| 82197224     | Granted   | 7546514       | 4/11/2005   | 6/9/2009   | 11/103130          | US | Chip Correct And Fault Isolation In Computer Memory Systems                                                                   |
| 82261715     | Granted   | 8418005       | 5/6/2010    | 41373      | 12/775307          | US | Methods, Apparatus And Articles Of Manufacture To Diagnose Temperature Induced Memory Errors                                  |
| 82651109     | Published |               | 10/2/2008   |            | 13/122544          | US | Cache Controller And Method Of Operation                                                                                      |
| 82892428     | Granted   | 8782452       | 7/27/2009   | 7/15/2014  | 13/383359          | US | METHOD AND SYSTEM FOR POWER-EFFICIENT AND NON-SIGNAL-DEGRADING VOLTAGE REGULATION IN MEMORY SUBSYSTEMS                        |
| 83982112     | Published |               | 4/11/2012   |            | 14/368474          | US | PRIORITIZED CONFLICT HANDLING IN A SYSTEM                                                                                     |

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| 90024617     | Application |               | 3/25/2013   |            | 14/767479 US       | US | MEMORY DEVICE HAVING ERROR CORRECTION LOGIC                                                                                                                           |
| 82071422     | Granted     | 7945567       | 3/17/2003   | 5/17/2011  | 10/388601 US       | US | STORING AND/OR RETRIEVING A DOCUMENT WITHIN A KNOWLEDGE BASE OR DOCUMENT REPOSITORY                                                                                   |
| 82098896     | Granted     | 8548882       | 9/26/2003   | 10/1/2013  | 10/672953 US       | US | Determination Of A Bid Value Associated With A Selected Bidder                                                                                                        |
| 82220387     | Granted     | 7779344       | 10/31/2006  | 8/17/2010  | 11/590188 US       | US | System And Method For Creating A Value-based Stacked Bar Chart                                                                                                        |
| 82224509     | Published   |               | 10/31/2006  |            | 11/590407 US       | US | Methods For Planning Workforce Resources                                                                                                                              |
| 82238684     | Granted     | 8620834       | 6/4/2010    | 12/31/2013 | 12/794150 US       | US | Forecasting Through Time Domain Analysis                                                                                                                              |
| 82252043     | Granted     | 6081810       | 2/3/1998    | 6/27/2000  | 09/018149 US       | US | Report Database System                                                                                                                                                |
| 82254287     | Granted     | 7085750       | 6/28/2002   | 38930      | 10/185998 US       | US | Method And System For Mapping A Hypothesis To An Analytical Structure                                                                                                 |
| 82255100     | Granted     | 8868405       | 1/27/2004   | 41933      | 10/766308 US       | US | System And Method For Comparative Analysis Of Textual Documents                                                                                                       |
| 82255721     | Granted     | 8554593       | 4/5/2004    | 41555      | 10/818008 US       | US | SYSTEM AND METHOD FOR QUANTITATIVE ASSESSMENT OF ORGANIZATIONAL ADAPTABILITY                                                                                          |
| 82257284     | Granted     | 8082194       | 3/30/2007   | 40897      | 11/694734 US       | US | Systems And Processes For Determining Costs Associated With Internal Software Development                                                                             |
| 82275644     | Published   |               | 12/14/2010  |            | 12/968011 US       | US | DESIGN OF WARRANTY BONUSES FOR PRODUCTS                                                                                                                               |
| 82277639     | Granted     | 7233955       | 7/8/2003    | 39252      | 10/614517 US       | US | System And Method For Searching And Retrieving Information Regarding Related Goods And Services                                                                       |
| 82392197     | Granted     | 8396204       | 10/6/2011   | 41345      | 13/267231 US       | US | Call Center Resource Allocation                                                                                                                                       |
| 82572506     | Published   |               | 4/15/2011   |            | 13/088161 US       | US | Determining work placement preferences                                                                                                                                |
| 82663137     | Published   |               | 7/7/2011    |            | 13/178072 US       | US | MAKING AN EXTENDED WARRANTY COVERAGE DECISION                                                                                                                         |
| 82839690     | Published   |               | 1/30/2012   |            | 13/361064 US       | US | DOCUMENT CERTIFICATES                                                                                                                                                 |
| 82929139     | Published   |               | 8/17/2009   |            | 13/387331 US       | US | SCORING A MATCHING BETWEEN A RESOURCE AND A JOB                                                                                                                       |
| 82933965     | Published   |               | 10/26/2009  |            | 13/386486 US       | US | ADJUSTING A POINT PREDICTION THAT IS PART OF THE LONG-TERM PRODUCT LIFE CYCLE BASED FORECAST                                                                          |
| 83097202     | Published   |               | 3/8/2010    |            | 13/581602 US       | US | EVALUATION OF NEXT ACTIONS BY CUSTOMERS                                                                                                                               |
| 83255613     | Published   |               | 1/27/2011   |            | 13/883364 US       | US | ELECTRONIC BOOK WITH CHANGEABLE PATHS                                                                                                                                 |
| 82077170     | Granted     | 5974146       | 7/30/1997   | 36459      | 08/903102 US       | US | Real Time Bank-centric Universal Payment System (bits)                                                                                                                |
| 82077293     | Granted     | 6016484       | 4/26/1996   | 1/18/2000  | 08/639880 US       | US | System, Method And Article Of Manufacture For Network Electronic Payment Instrument And Certification Of Payment And Credit Collection Utilizing A Payment            |
| 82077485     | Granted     | 6119105       | 6/17/1996   | 36781      | 08/664446 US       | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR INITIATION OF SOFTWARE DISTRIBUTION FROM A POINT OF CERTIFICATE CREATION UTILIZING AN EXTENSIBLE, FLEXIBLE ARCHITECTURE |
| 82225010     | Granted     | 7610177       | 10/27/2006  | 40113      | 11/588833 US       | US | Manufacturing Execution System, Equipment Interface And Method Of Operating A Manufacturing Execution System                                                          |

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| 82251791     | Granted     | 6009408       | 4/1/1996    | 36522      | 08/625971          | US | Automated Processing Of Travel Related Expenses                                                     |
| 82252169     | Granted     | 7302399       | 11/10/1999  | 39413      | 09/437278          | US | METHOD AND SYSTEM FOR PROCESSING TRAVEL RESERVATION DATA                                            |
| 82252355     | Granted     | 5781892       | 11/13/1995  | 35990      | 08/557508          | US | Method And Apparatus For Interacting With A Computer Reservation System                             |
| 82252730     | Granted     | 5832463       | 3/28/1996   | 36102      | 08/623584          | US | Automated System And Method For Checkless Check Transaction                                         |
| 82257038     | Granted     | 7761062       | 10/26/2005  | 40379      | 11/259470          | US | Automatically Managing Rental Vehicles                                                              |
| 82257095     | Granted     | 7653481       | 5/25/2006   | 40204      | 11/420303          | US | In-transit Two-way Route Communication Between A Handheld Positioning Device And A Service Provider |
| 82257410     | Granted     | 7965199       | 4/2/2008    | 40715      | 12/033265          | US | VEHICULAR SIGNATURE APPARATUS AND ASSOCIATED METHODOLOGY                                            |
| 82257413     | Granted     | 8793048       | 12/26/2007  | 41849      | 11/964488          | US | APPARATUS AND METHOD FOR ANALYZING MULTIPLE FAULT OCCURRENCE OF MULTIPLE-STATE DEVICE               |
| 82257596     | Published   |               | 5/29/2008   |            | 12/154993          | US | SYSTEM AND METHOD FOR MESSAGE-QUEUE-BASED SERVER TESTING                                            |
| 82962847     | Granted     | 8838301       | 4/26/2012   | 41898      | 13/456784          | US | TRAIN TRAFFIC ADVISOR SYSTEM AND METHOD THEREOF                                                     |
| 82237679     | Granted     | 8250536       | 12/24/2007  | 41142      | 11/963966          | US | Analysis Of A Legacy Source Code Application                                                        |
| 82251665     | Granted     | 6670973       | 6/29/1999   | 37985      | 09/342481          | US | System And Method For Representing The Information Technology Infrastructure Of An Organization     |
| 82252538     | Granted     | 5805812       | 5/15/1996   | 36046      | 08/647552          | US | Communication System For The Remote Control Of Equipment                                            |
| 82252601     | Granted     | 5731991       | 5/3/1996    | 35878      | 08/642068          | US | Software Product Evaluation                                                                         |
| 82252604     | Granted     | 5893904       | 6/14/1996   | 36263      | 08/663961          | US | System And Method For Brokering The Allocation Of An Item Of Business Property                      |
| 82252667     | Granted     | 5864660       | 11/20/1997  | 1/26/1999  | 08/975394          | US | INTEGRATION TESTING                                                                                 |
| 82253105     | Granted     | 6993745       | 3/9/2000    | 1/31/2006  | 09/522319          | US | Method And System For Modeling A Legacy Computer System                                             |
| 82254476     | Granted     | 8386852       | 11/5/2002   | 2/26/2013  | 10/287794          | US | Automated Recording And Replaying Of Software Regression Tests                                      |
| 82274705     | Granted     | 7454499       | 11/7/2002   | 11/18/2008 | 10/291095          | US | Active Network Defense System and Method                                                            |
| 82274765     | Granted     | 8125905       | 9/3/2009    | 2/28/2012  | 12/553664          | US | System and Method for Processing Network Packet Flows                                               |
| 82274768     | Granted     | 7024489       | 12/31/2001  | 4/4/2006   | 10/036584          | US | System and Method for Disparate Physical Interface Conversion                                       |
| 82274888     | Granted     | 8756337       | 7/31/2008   | 6/17/2014  | 12/183143          | US | NETWORK PACKET INSPECTION FLOW MANAGEMENT                                                           |
| 82274894     | Granted     | 8307440       | 7/31/2008   | 11/6/2012  | 12/183394          | US | NON-BLOCKING SHARED STATE IN AN INTRUSION PREVENTION SYSTEM                                         |
| 84141104     | Application |               | 9/10/2012   |            | 14/418920          | US | USE OF PRIMARY AND SECONDARY CONNECTION TABLES                                                      |
| 82579207     | Granted     | 8056130       | 4/4/2008    | 11/8/2011  | 12/098322          | US | Real Time Monitoring And Analysis Of Events From Multiple Network Security Devices                  |

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| 82579250     | Granted     | 8613083       | 4/25/2007   | 12/17/2013 | 11/7/40203         | US | Method For Batching Events For Transmission By Software Agent                                                                                                            |
| 82579287     | Granted     | 7984502       | 10/1/2008   | 7/19/2011  | 12/243838          | US | Pattern Discovery In A Network System                                                                                                                                    |
| 82579327     | Granted     | 7647632       | 1/4/2005    | 1/12/2010  | 11/029920          | US | Object Reference In A System                                                                                                                                             |
| 82579430     | Granted     | 8577829       | 9/13/2010   | 11/5/2013  | 12/881036          | US | Extracting Information From Unstructured Data And Making The Information To A Structured Schema Using The Naïve Bayesian Probability Model                               |
| 82579436     | Published   |               | 11/9/2010   |            | 12/942890          | US | Enabling Full-Text Searching Using A Structured Data Store                                                                                                               |
| 83099990     | Granted     | 9118704       | 10/24/2012  | 42241      | 13/659677          | US | HOMOGLYPH MONITORING                                                                                                                                                     |
| 83138802     | Granted     | 9003537       | 1/31/2013   | 42101      | 13/755831          | US | CVSS Information Update by Analyzing Vulnerability Information                                                                                                           |
| 83696820     | Application |               | 6/30/2011   |            | 14/125785          | US | SYSTEMS AND METHODS FOR MERGING PARTIALLY AGGREGATED QUERY RESULTS                                                                                                       |
| 90043618     | Application |               | 3/11/2013   |            | 14/773983          | US | EVENT CORRELATION BASED ON CONFIDENCE FACTOR                                                                                                                             |
| 82090529     | Granted     | 7305508       | 10/22/2003  | 12/4/2007  | 10/692038          | US | Semaphoring System Between System Firmware And Hardware Manipulation Subsystem                                                                                           |
| 82130615     | Granted     | 6249814       | 9/22/1997   | 6/19/2001  | 08/934636          | US | Method And Apparatus For Identifying Devices On A Network                                                                                                                |
| 82136729     | Granted     | 6199179       | 6/10/1998   | 3/6/2001   | 09/095266          | US | METHOD AND APPARATUS FOR FAILURE RECOVERY IN A MULTI-PROCESSOR COMPUTER SYSTEM                                                                                           |
| 82177625     | Granted     | 7293168       | 12/15/2004  | 39392      | 11/014014          | US | System And Method For Initially Configuring And Booting A Device Using A Device Identifier                                                                               |
| 82193606     | Granted     | 7447889       | 4/20/2005   | 39756      | 11/110157          | US | Method And Apparatus For Configuring A Computer System Utilizing A Read Only Memory Storing An Option File Containing Selectable Configuration Options And A Script File |
| 82219889     | Granted     | 8082543       | 8/17/2006   | 40897      | 11/465161          | US | Methods And Systems For Arbitrating Error Handling And Firmware Updates                                                                                                  |
| 82260407     | Granted     | 8601128       | 12/10/2009  | 41611      | 12/635580          | US | Managing Hardware Resources For Soft Partitioning                                                                                                                        |
| 82260593     | Granted     | 8108724       | 12/17/2009  | 1/31/2012  | 12/641072          | US | Field Replaceable Unit Failure Determination                                                                                                                             |
| 82260653     | Published   |               | 12/16/2009  |            | 12/639857          | US | PHYSICAL CHASSIS AS A DIFFERENT NUMBER OF LOGICAL CHASSIS                                                                                                                |
| 82260656     | Granted     | 8266356       | 12/10/2009  | 9/11/2012  | 12/635613          | US | Interconnecting Computing Modules To Form An Integrated System                                                                                                           |
| 82962996     | Allowed     |               | 4/25/2012   |            | 13/455467          | US | AUTHENTICATION USING LIGHTS-OUT MANAGEMENT CREDENTIALS                                                                                                                   |
| 82837191     | Granted     | 8086598       | 2/6/2009    | 12/27/2011 | 12/367415          | US | QUERY OPTIMIZER WITH SCHEMA CONVERSION                                                                                                                                   |
| 82850138     | Published   |               | 5/14/2012   |            | 13/470762          | US | SWITCHING ALGORITHMS DURING A RUN TIME COMPUTATION                                                                                                                       |
| 82961645     | Published   |               | 4/27/2012   |            | 13/458142          | US | EVALUATION BY NESTED QUERIES                                                                                                                                             |

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| 82251854     | Granted     | 6151609       | 8/16/1996   | 11/21/2000 | 08/699076          | US | Remote Editor System                                                                                                                 |
| 82256597     | Granted     | 7426485       | 9/14/2004   | 9/16/2008  | 10/940425          | US | System, Method, And Computer Program Product For Brokering Data Processing Service Licenses                                          |
| 82256600     | Granted     | 8806061       | 9/14/2004   | 8/12/2014  | 10/940424          | US | System, Method, And Computer Program Product For Automated Categorization Of Data Processing Services And Components                 |
| 83991664     | Published   |               | 4/30/2012   |            | 14/373780          | US | AUTOMATED EVENT MANAGEMENT                                                                                                           |
| 82035590     | Granted     | 6185329       | 10/13/1998  | 2/6/2001   | 09/170995          | US | Automatic Caption Text Detection And Processing For Digital Images                                                                   |
| 82947616     | Granted     | 6701362       | 2/23/2000   | 3/2/2004   | 09/510902          | US | METHOD FOR CREATING USER PROFILES                                                                                                    |
| 82947656     | Granted     | 8392175       | 5/21/2010   | 3/5/2013   | 12/785105          | US | PHRASE-BASED DOCUMENT CLUSTERING WITH AUTOMATIC PHRASE EXTRACTION                                                                    |
| 82948094     | Granted     | 5913205       | 3/28/1997   | 6/15/1999  | 08/825831          | US | QUERY OPTIMIZATION FOR VISUAL INFORMATION RETRIEVAL SYSTEM                                                                           |
| 82948097     | Granted     | 5911139       | 3/28/1997   | 6/8/1999   | 08/828360          | US | A VISUAL IMAGE DATABASE SEARCH ENGINE WHICH ALLOWS FOR DIFFERENT SCHEMA                                                              |
| 82948114     | Granted     | 6360234       | 8/14/1998   | 3/19/2002  | 09/134497          | US | VIDEO CATALOGER SYSTEM WITH SYNCHRONIZED ENCODERS AND PHRASES                                                                        |
| 82948320     | Granted     | 7031909       | 3/12/2002   | 4/18/2006  | 10/096048          | US | METHOD AND SYSTEM FOR NAMING A CLUSTER OF WORDS AND PHRASES                                                                          |
| 83159715     | Published   |               | 1/25/2013   |            | 13/750746          | US | VIDEO-ENABLED ELECTRONIC COMMERCE                                                                                                    |
| 82116875     | Granted     | RE40530       | 10/20/2000  | 10/7/2008  | 09/694416          | US | PUBLIC KEY CRYPTOGRAPHIC APPARATUS AND METHOD                                                                                        |
| 82116878     | Granted     | 7231040       | 10/26/1998  | 6/12/2007  | 09/328726          | US | A MULTIPRIME RSA PUBLIC KEY CRYPTOSYSTEM                                                                                             |
| 82209524     | Granted     | 7549064       | 5/10/2005   | 6/16/2009  | 11/125458          | US | Secure Circuit Assembly                                                                                                              |
| 82265216     | Granted     | 8667244       | 3/21/2011   | 3/4/2014   | 13/052755          | US | METHODS, SYSTEMS, AND APPARATUS TO PREVENT MEMORY IMPRINTING                                                                         |
| 84237832     | Application |               | 12/11/2012  |            | 14/650631          | US | Data Operation in Shift Register Ring                                                                                                |
| 84265695     | Application |               | 8/4/2015    |            | 14/817978          | US | SECURE KEY COMPONENT AND PIN ENTRY                                                                                                   |
| 82173998     | Granted     | 7310681       | 6/23/2003   | 39434      | 10/601956          | US | System And Method For Modeling The Memory State Of A Streaming Media Server                                                          |
| 82045331     | Granted     | 6903366       | 10/31/2003  | 38510      | 10/699172          | US | Chemically Synthesized And Assembled Electronic Devices                                                                              |
| 82050509     | Granted     | 6891744       | 11/6/2002   | 5/10/2005  | 10/289703          | US | Configurable Nanoscale Crossbar Electronic Circuits Made By Electrochemical Reaction                                                 |
| 82086038     | Granted     | 7786467       | 4/25/2005   | 8/31/2010  | 11/114307          | US | Three-dimensional Nanoscale Crossbars                                                                                                |
| 82094153     | Granted     | 7359888       | 1/31/2003   | 4/15/2008  | 10/355801          | US | Molecular-junction-nanowire-crossbar-based Neural Network                                                                            |
| 82099709     | Granted     | 7292498       | 5/6/2005    | 39392      | 11/123551          | US | Factored Nanoscale Multiplexer/demultiplexer Circuit For Interfacing Nanowires With Microscale And Sub-microscale Electronic Devices |

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| 82214642     | Granted     | 7530032       | 10/28/2005  | 5/5/2009   | 11/262354          | US | NANOWIRE CROSSBAR IMPLEMENTATIONS OF LOGIC GATES USING CONFIGURABLE, TUNNELING RESISTOR JUNCTIONS |
| 82226321     | Granted     | 8766224       | 10/3/2006   | 7/1/2014   | 11/542986          | US | Electrically Actuated Switch                                                                      |
| 82228007     | Granted     | 7763880       | 2/14/2007   | 7/27/2010  | 11/706119          | US | Multi-terminal Electrically Actuated Switch                                                       |
| 82262090     | Granted     | 8207520       | 4/2/2010    | 6/26/2012  | 12/753715          | US | PROGRAMMABLE CROSSPOINT DEVICE WITH AN INTEGRATED DIODE                                           |
| 82264652     | Granted     | 8331129       | 9/3/2010    | 12/11/2012 | 12/875423          | US | MEMORY ARRAY WITH WRITE FEEDBACK                                                                  |
| 82264655     | Granted     | 8766231       | 3/7/2011    | 7/1/2014   | 13/041617          | US | Nanoscale Electronic Device with Barrier Layers                                                   |
| 82631707     | Published   |               | 3/17/2011   |            | 13/050349          | US | SENSING RESISTIVE STATES                                                                          |
| 82747708     | Granted     | 8445884       | 1/15/2009   | 5/21/2013  | 13/130830          | US | MEMRISTOR WITH NANOSTRUCTURE ELECTRODES                                                           |
| 82755119     | Granted     | 8542071       | 10/25/2011  | 9/24/2013  | 13/280808          | US | CHAOTIC OSCILLATOR-BASED RANDOM NUMBER GENERATION                                                 |
| 82756384     | Granted     | 8880782       | 10/20/2011  | 41947      | 13/277837          | US | MEMORY ARRAY INCLUDING MULTI-STATE MEMORY DEVICES                                                 |
| 82781044     | Granted     | 8450711       | 1/26/2009   | 41422      | 13/142582          | US | Semiconductor Memristor Devices                                                                   |
| 82837254     | Granted     | 8373440       | 4/6/2009    | 41317      | 13/256233          | US | THREE DIMENSIONAL MULTILAYER CIRCUIT                                                              |
| 82837343     | Published   |               | 6/25/2009   |            | 13/256249          | US | SWITCHABLE JUNCTION WITH INTRINSIC DIODES WITH DIFFERENT SWITCHING THRESHOLDS                     |
| 82852408     | Granted     | 8710483       | 7/10/2009   | 41758      | 13/258499          | US | MEMRISTIVE JUNCTION WITH INTRINSIC RECTIFIER                                                      |
| 82853092     | Published   |               | 8/14/2009   |            | 13/259177          | US | MULTILAYER CIRCUIT                                                                                |
| 82930547     | Granted     | 8542515       | 4/30/2010   | 41541      | 13/384872          | US | CONNECTION AND ADDRESSING OF MULTI-PLANE CROSSPOINT DEVICES                                       |
| 82939893     | Allowed     |               | 2/9/2010    |            | 13/387307          | US | MEMORY RESISTOR ADJUSTMENT USING FEEDBACK CONTROL                                                 |
| 82943866     | Granted     | 8860519       | 10/15/2009  | 10/14/2014 | 13/388440          | US | DEVICE HAVING INDUCTOR AND MEMCAPACITOR                                                           |
| 82978184     | Granted     | 8767449       | 6/28/2012   | 7/1/2014   | 13/536602          | US | MEMORY DEVICES WITH IN-BIT CURRENT LIMITERS                                                       |
| 83013690     | Granted     | 9063864       | 7/16/2012   | 6/23/2015  | 13/549819          | US | STORING DATA IN PERSISTENT HYBRID MEMORY                                                          |
| 83137846     | Granted     | 8780601       | 6/8/2010    | 7/15/2014  | 13/700224          | US | THREE-DIMENSIONAL INTEGRATED CIRCUIT                                                              |
| 83138633     | Allowed     |               | 1/29/2013   |            | 13/753152          | US | NEURISTOR-BASED RESERVOIR COMPUTING DEVICES                                                       |
| 83174511     | Granted     | 8792289       | 7/28/2010   | 7/29/2014  | 13/812050          | US | REWRITING A MEMORY ARRAY                                                                          |
| 83778626     | Allowed     |               | 6/24/2011   |            | 14/127873          | US | HIGH-RELIABILITY HIGH-SPEED MEMRISTOR                                                             |
| 83785516     | Published   |               | 2/14/2014   |            | 14/181436          | US | Electrically Actuated Switch                                                                      |
| 83927754     | Granted     | 9018083       | 5/23/2014   | 4/28/2015  | 14/286513          | US | Electrically Actuated Device And Method Of Controlling The Formation Of Dopants Therein           |
| 84078611     | Published   |               | 7/31/2012   |            | 14/396406          | US | NON-VOLATILE RESISTIVE MEMORY CELLS                                                               |
| 90063532     | Application |               | 9/23/2015   |            | 14/862987          | US | MEMRISTORS WITH ASYMMETRIC ELECTRODES                                                             |
| 81998192     | Granted     | 7647384       | 11/7/2002   | 40190      | 10/289308          | US | Method And System For Managing Fragmented Information Packets In A Computer Network               |

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| 81998195     | Granted     | 7483980       | 11/7/2002   | 1/27/2009  | 10/289288          | US | Method And System For Managing Connections In A Computer Network                                             |
| 82083104     | Granted     | 7043730       | 8/29/2002   | 5/9/2006   | 10/232783          | US | System And Method For Demand Oriented Network Resource Management                                            |
| 82083284     | Granted     | 7865715       | 2/28/2002   | 1/4/2011   | 10/084499          | US | Increasing Peer Privacy                                                                                      |
| 82172564     | Granted     | 8514865       | 4/30/2004   | 8/20/2013  | 10/835404          | US | Assigning Wan Links To Subflows Based On Wan Link Characteristics And Application Preferences                |
| 82190981     | Granted     | 7827279       | 1/30/2004   | 11/2/2010  | 10/767285          | US | Selecting Nodes Close To Another Node In A Network Using Location Information For The Nodes                  |
| 82215455     | Granted     | 8031617       | 7/28/2006   | 10/4/2011  | 11/495931          | US | Fast Detection Of Path Failure For TCP                                                                       |
| 82225385     | Granted     | 7788437       | 10/27/2006  | 8/31/2010  | 11/553970          | US | Computer System With Network Interface Retransmit                                                            |
| 82225442     | Granted     | 8982709       | 1/31/2007   | 3/17/2015  | 11/700441          | US | Selecting Service Nodes For An End-to-end Service Path From A Reduced Search Space                           |
| 82229816     | Application |               | 6/22/2007   |            | 11/767151          | US | Clustering Approach To Estimating A Network Metric For Nodes                                                 |
| 82250045     | Granted     | 8392737       | 6/17/2010   | 3/5/2013   | 12/817907          | US | A System For Controlling Power Consumption Of A Network                                                      |
| 82263155     | Granted     | 8391174       | 7/13/2010   | 3/5/2013   | 12/834951          | US | DATA PACKET ROUTING                                                                                          |
| 82766420     | Allowed     |               | 1/19/2009   |            | 13/145251          | US | Load Balancing                                                                                               |
| 83011941     | Granted     | 8965398       | 9/26/2012   | 2/24/2015  | 13/627982          | US | BLUETOOTH BEACON BASED LOCATION DETERMINATION                                                                |
| 83863160     | Published   |               | 10/11/2011  |            | 14/347394          | US | Authenticating a User's Location in a Femtocell-Based Network                                                |
| 84076510     | Application |               | 6/29/2012   |            | 14/391230          | US | Wireless Network with Coordinated Sectors to Mitigate Interference                                           |
| 84094658     | Published   |               | 5/1/2012    |            | 14/398579          | US | CONFIGURABLE CLOS NETWORK                                                                                    |
| 90017149     | Application |               | 1/31/2013   |            | 14/763498          | US | Generating a Hint for a Query                                                                                |
| 90051009     | Application |               | 3/7/2013    |            | 14/773238          | US | CLOUD APPLICATION BANDWIDTH MODELING                                                                         |
| 82175498     | Granted     | 7657137       | 1/11/2008   | 2/2/2010   | 12/008618          | US | Photonic Interconnect System                                                                                 |
| 82178495     | Granted     | 7874739       | 1/22/2008   | 1/25/2011  | 12/017336          | US | Optical Connections And Methods Of Forming Optical Connections                                               |
| 82178498     | Granted     | 7269321       | 8/10/2004   | 39336      | 10/915613          | US | SYSTEM AND METHOD OF CONFIGURING FIBER OPTIC COMMUNICATION CHANNELS BETWEEN ARRAYS OF EMITTERS AND DETECTORS |
| 82198409     | Granted     | 7405866       | 11/19/2004  | 7/29/2008  | 10/993616          | US | Composite Material With Controllable Resonant Cells                                                          |
| 82207400     | Granted     | 8098971       | 9/19/2005   | 1/17/2012  | 11/230216          | US | METHOD AND APPARATUS FOR ELECTROMAGNETIC RESONANCE USING NEGATIVE INDEX MATERIAL                             |
| 82208273     | Granted     | 7043104       | 6/14/2005   | 38846      | 11/152857          | US | High Gain Optical Probe                                                                                      |
| 82213148     | Granted     | 7474810       | 5/15/2007   | 39819      | 11/701014          | US | Method And Apparatus For Controlling Light Flux With Sub-micron Plasmon Waveguides                           |
| 82213586     | Granted     | 7545014       | 10/12/2006  | 6/9/2009   | 11/580385          | US | Three-dimensional Resonant Cells With Tilt Up Fabrication                                                    |

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| 82218641     | Granted | 7546000       | 9/7/2006    | 6/9/2009   | 11/517501          | US | Scalable And Defect-tolerant Color-center-based Quantum Computer Architectures And Methods For Fabricating Center-based Quantum Computer Architectures |
| 82220573     | Granted | 7482727       | 10/13/2006  | 1/27/2009  | 11/580641          | US | Composite Material With Conductive Nanowires                                                                                                           |
| 82222697     | Granted | 8111440       | 4/26/2007   | 2/7/2012   | 11/789816          | US | Structure And Method For Modulating Light                                                                                                              |
| 82223570     | Granted | 7719678       | 4/25/2007   | 5/18/2010  | 11/796011          | US | Nanowire Configured To Couple Electromagnetic Radiation To Selected Guided Wave, Devices Using Same, And Methods Of Fabricating Same                   |
| 82223573     | Granted | 7805030       | 3/8/2007    | 9/28/2010  | 11/716174          | US | Optical Structures Including Selectively Positioned Color Centers, Photonic Chips Including Same, And Methods Of Fabricating Optical Structures        |
| 82223762     | Granted | 7591193       | 10/11/2006  | 9/22/2009  | 11/546598          | US | Hot-wire Nano-anemometer                                                                                                                               |
| 82226945     | Granted | 7804175       | 1/31/2007   | 9/28/2010  | 11/700034          | US | SEMICONDUCTOR STRUCTURES INCLUDING CONDUCTIVE VIAS CONTINUOUSLY EXTENDING THERE THROUGH AND METHODS OF MAKING THE SAME                                 |
| 82227005     | Granted | 7778501       | 4/3/2007    | 40407      | 11/732549          | US | Integrated Circuits Having Photonic Interconnect Layers And Methods For Fabricating Same                                                               |
| 82230311     | Granted | 8054531       | 6/26/2007   | 11/8/2011  | 11/823336          | US | MICRO-ELECTRO-MECHANICAL SYSTEMS AND PHOTONIC INTERCONNECTS EMPLOYING THE SAME                                                                         |
| 82230500     | Granted | 8150267       | 4/18/2007   | 41002      | 11/788268          | US | OPTICAL INTERCONNECT                                                                                                                                   |
| 82230503     | Granted | 8929741       | 7/30/2007   | 1/6/2015   | 11/881943          | US | Optical Interconnect                                                                                                                                   |
| 82232498     | Granted | 7499615       | 8/1/2007    | 39875      | 11/832559          | US | System And Methods For Routing Optical Signals                                                                                                         |
| 82232810     | Granted | 7561320       | 10/26/2007  | 40008      | 11/977886          | US | Modulation Of Electromagnetic Radiation With Electrically Controllable Composite Material                                                              |
| 82233437     | Granted | 7925168       | 10/16/2007  | 4/12/2011  | 11/873325          | US | OPTICAL INTERCONNECT SYSTEM PROVIDING COMMUNICATION BETWEEN COMPUTER SYSTEM COMPONENTS                                                                 |
| 82234559     | Granted | 7546012       | 10/23/2007  | 6/9/2009   | 11/876958          | US | Waveguide System With Diffracting Structure                                                                                                            |
| 82234931     | Granted | 7561770       | 7/30/2007   | 7/14/2009  | 11/888016          | US | Microresonator Systems And Methods Of Fabricating The Same                                                                                             |
| 82234937     | Granted | 8175429       | 6/5/2009    | 41037      | 12/479589          | US | MICRORESONATOR SYSTEMS AND METHODS OF FABRICATING THE SAME                                                                                             |
| 82235000     | Granted | 8064739       | 10/23/2007  | 11/22/2011 | 11/977350          | US | THREE-DIMENSIONAL DIE STACKS WITH INTER-DEVICE AND INTRA-DEVICE OPTICAL INTERCONNECT                                                                   |
| 82235249     | Granted | 7781853       | 7/26/2007   | 8/24/2010  | 11/881266          | US | Plasmon-enhanced Electromagnetic-radiation-emitting Devices And Methods For Fabricating The Same                                                       |
| 82236308     | Granted | 8320767       | 10/31/2008  | 11/27/2012 | 12/263407          | US | FREE-SPACE PHOTONIC CONNECTION USING WAVELENGTH DIVISION MULTIPLEXING AND OPTICAL ANTENNA                                                              |

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| 82239554     | Granted   | 8571363       | 12/14/2007  | 10/29/2013 | 12/743769          | US | RING RESONATOR WITH INDUCTANCE COUPLED HEAT TUNING                                                          |
| 82239803     | Granted   | 8129710       | 10/31/2008  | 3/6/2012   | 12/262451          | US | Plasmon Enhanced Nanowire Light Emitting Diode                                                              |
| 82239863     | Granted   | 8983238       | 10/28/2008  | 3/17/2015  | 12/260016          | US | Optical Resonator Tuning Using Piezoelectric Actuation                                                      |
| 82240115     | Granted   | 8059443       | 10/23/2007  | 11/15/2011 | 11/975963          | US | Three-dimensional Memory Module Architectures                                                               |
| 82242554     | Granted   | 8472802       | 3/10/2008   | 41450      | 12/921763          | US | Two-phase Optical Communication Methods And Optical Systems For Implementing The Same                       |
| 82247612     | Granted   | 7907811       | 10/31/2008  | 3/15/2011  | 12/263400          | US | Optical Waveguides And Methods Of Making The Same                                                           |
| 82249481     | Granted   | 7977622       | 2/9/2009    | 7/12/2011  | 12/322896          | US | TUNING AN OPTICAL RESONATOR USING A FEEDBACK SIGNAL REPRESENTING AN AVERAGE DC BALANCED CODING              |
| 82258346     | Granted   | 8130754       | 7/10/2009   | 3/6/2012   | 12/501000          | US | ON-CHIP AND CHIP-TO-CHIP ROUTING USING A PROCESSOR ELEMENT/ROUTER COMBINATION                               |
| 82261778     | Granted   | 8452141       | 7/30/2010   | 5/28/2013  | 12/847885          | US | OPTICAL WAVEGUIDE COUPLING DEVICE AND ASSOCIATED METHODS                                                    |
| 82261784     | Granted   | 8369664       | 7/30/2010   | 41310      | 12/847429          | US | OPTICAL APPARATUS FOR FORMING A TUNABLE CAVITY                                                              |
| 82261841     | Granted   | 8576890       | 4/26/2010   | 41583      | 12/767474          | US | VERTICAL-CAVITY SURFACE-EMITTING LASER                                                                      |
| 82262591     | Granted   | 8705972       | 5/11/2010   | 4/22/2014  | 12/777500          | US | ENERGY-EFFICIENT AND FAULT-TOLERANT RESONATOR-BASED MODULATION AND WAVELENGTH DIVISION MULTIPLEXING SYSTEMS |
| 82263962     | Granted   | 8437592       | 10/19/2010  | 5/7/2013   | 12/907662          | US | OPTICAL CHANNEL TAP ASSEMBLY                                                                                |
| 82405250     | Granted   | 8811778       | 5/6/2008    | 8/19/2014  | 12/991048          | US | SYSTEMS AND METHODS FOR ROUTING OPTICAL SIGNALS                                                             |
| 82405439     | Granted   | 8724936       | 5/8/2008    | 5/13/2014  | 12/991638          | US | Optical Polymorphic Computer Systems                                                                        |
| 82576771     | Granted   | 8385000       | 4/15/2011   | 2/26/2013  | 13/087776          | US | CONCENTRIC RING DIELECTRIC LENS                                                                             |
| 82595709     | Granted   | 8873893       | 7/31/2008   | 10/28/2014 | 13/002884          | US | Nano-wire Optical Block Devices For Amplifying, Modulating, And Detecting Optical Signals                   |
| 82716639     | Granted   | 8570762       | 10/31/2008  | 10/29/2013 | 13/124097          | US | VARIABLELY CONFIGURABLE COMPUTER BUSES                                                                      |
| 82755889     | Granted   | 8948554       | 10/10/2011  | 2/3/2015   | 13/269659          | US | SLOT-LINE WAVEGUIDE OPTICAL SWITCH SYSTEM AND METHOD                                                        |
| 82755926     | Granted   | 8817254       | 10/28/2011  | 8/26/2014  | 13/284536          | US | ENTANGLEMENT PROCESS                                                                                        |
| 82805249     | Published |               | 1/30/2009   |            | 13/145995          | US | PLASMONIC LIGHT EMITTING DIODE                                                                              |
| 82806460     | Granted   | 8660390       | 1/27/2009   | 2/25/2014  | 13/146473          | US | REDUNDANT RING RESONATORS OF VARYING DIMENSIONS TO REDUCE RING RESONATOR TUNING REQUIREMENTS                |
| 82852202     | Granted   | 8705911       | 5/6/2009    | 4/22/2014  | 13/258425          | US | BUS-BASED SCALABLE OPTICAL FABRICS                                                                          |
| 82852242     | Published |               | 4/28/2009   |            | 13/258411          | US | HOLOGRAPHIC MIRROR FOR OPTICAL INTERCONNECT SIGNAL ROUTING                                                  |
| 82853072     | Granted   | 8476647       | 9/25/2009   | 7/2/2013   | 13/259455          | US | SILICON-GERMANIUM, QUANTUM-WELL, LIGHT-EMITTING DIODE                                                       |
| 82854071     | Published |               | 7/31/2009   |            | 13/260064          | US | BEAM DIRECTION SENSOR                                                                                       |

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| 82931446     | Granted     | 8678600       | 3/19/2010   | 3/25/2014  | 13/387010          | US | OPTICAL STAR COUPLER                                                                                                                                       |
| 83099529     | Granted     | 9082745       | 4/30/2010   | 7/14/2015  | 13/640290          | US | CIRCUIT MODULE                                                                                                                                             |
| 83242125     | Granted     | 8821033       | 10/29/2010  | 9/2/2014   | 13/881087          | US | OPTICAL CONNECTOR                                                                                                                                          |
| 83254989     | Granted     | 8805189       | 5/20/2013   | 41863      | 13/898111          | US | Two-phase Optical Communication Methods And Optical                                                                                                        |
|              |             |               |             |            |                    |    | Systems For Implementing The Same                                                                                                                          |
| 83278378     | Published   |               | 1/21/2011   |            | 13/991853          | US | WAVEFRONT SYNTHESIZER SYSTEMS                                                                                                                              |
| 83821222     | Published   |               | 8/31/2011   |            | 14/342098          | US | MULTIMODE FIBER FOR MODULATABLE SOURCE                                                                                                                     |
| 83852065     | Published   |               | 9/30/2011   |            | 14/347366          | US | OPTICAL POWER SPLITTER INCLUDING A ZIG-ZAG                                                                                                                 |
| 83883386     | Published   |               | 10/28/2011  |            | 14/353995          | US | DEVICES INCLUDING A DIAMOND LAYER                                                                                                                          |
| 83930310     | Published   |               | 12/9/2011   |            | 14/357781          | US | Optical Connections                                                                                                                                        |
| 83948796     | Published   |               | 1/10/2012   |            | 14/364082          | US | OPTICAL CONNECTORS                                                                                                                                         |
| 83959822     | Published   |               | 1/31/2012   |            | 14/371537          | US | COMBINATION UNDERFILL-DAM AND ELECTRICAL-INTERCONNECT STRUCTURE FOR AN OPTO-ELECTRONIC ENGINE                                                              |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 83987018     | Granted     | 9130342       | 2/29/2012   | 9/8/2015   | 14/373385          | US | UNIDIRECTIONAL RING LASERS                                                                                                                                 |
| 83992351     | Allowed     |               | 4/11/2012   |            | 14/373457          | US | ROUTING OPTICAL SIGNALS                                                                                                                                    |
| 84113029     | Published   |               | 7/30/2012   |            | 14/416781          | US | COMPACT PHOTONIC PLATFORMS                                                                                                                                 |
| 84121874     | Published   |               | 1/14/2015   |            | 14/596790          | US | OPTICAL DEVICES BASED ON NON-PERIODIC SUB-WAVELENGTH GRATINGS                                                                                              |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 90017936     | Application |               | 1/30/2013   |            | 14/763577          | US | DIRECTIONAL GRATING-BASED BACKLIGHTING                                                                                                                     |
| 82242926     | Application |               | 10/30/2008  |            | 12/261405          | US | REFINING A CONSTRAINT OF A COMPUTER EXECUTABLE SERVICE                                                                                                     |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 82837277     | Published   |               | 10/28/2011  |            | 13/283981          | US | PROVISIONING IAAS SERVICES                                                                                                                                 |
| 82901665     | Granted     | 9158568       | 1/30/2012   | 42290      | 13/360956          | US | INPUT/OUTPUT OPERATIONS AT A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER                                                                                      |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 83184693     | Published   |               | 7/30/2010   |            | 13/812585          | US | INFORMATION TECHNOLOGY SERVICE MANAGEMENT                                                                                                                  |
| 84265114     | Application |               | 8/7/2015    |            | 14/820926          | US | CLOUD MODELS BASED ON NETWORK DEFINITION DATA                                                                                                              |
| 82168508     | Granted     | 5765024       | 4/26/1996   | 6/9/1998   | 08/639881          | US | SYSTEM FOR REQUESTING ACCESS TO DMA CHANNEL HAVING ADDRESS NOT IN DMA REGISTERS BY REPLACING ADDRESS OF DMA REGISTER WITH ADDRESS OF REQUESTED DMA CHANNEL |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 82168511     | Granted     | 5875351       | 6/9/1998    | 2/23/1999  | 09/094218          | US | SYSTEM FOR REQUESTING ACCESS TO DMA CHANNEL HAVING ADDRESS NOT IN DMA REGISTERS BY REPLACING ADDRESS OF DMA REGISTER WITH ADDRESS OF REQUESTED DMA CHANNEL |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 82267835     | Granted     | 6128194       | 8/5/1997    | 10/3/2000  | 08/906026          | US | PC CARD WITH ELECTROMAGNETICAND THERMAL MANAGEMENT                                                                                                         |
| 84152843     | Application |               | 2/4/2015    |            | 14/613843          | US | ENDPOINT POLICY CHANGE                                                                                                                                     |
| 82002872     | Granted     | 6854065       | 7/30/2001   | 2/8/2005   | 09/918767          | US | Loadshedding Uninterruptible Power Supply                                                                                                                  |

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| 82026104     | Granted     | 5793628       | 4/30/1997   | 8/11/1998  | 08/846445          | US | MULTI-PHASE PULSE-WIDTH-MODULATION POWER CONVERTER                                                            |
| 82093649     | Granted     | 7049796       | 1/17/2003   | 5/23/2006  | 10/346971          | US | Hot Swap Power Delivery Circuit                                                                               |
| 82098959     | Granted     | 7437258       | 6/26/2003   | 39735      | 10/606713          | US | Use Of I2C Programmable Clock Generator To Enable Frequency Variation Under BMC Control                       |
| 82103579     | Granted     | 7653827       | 2/11/2004   | 1/26/2010  | 10/777917          | US | Power Distribution System Having Redundant Mixed Sources And Method                                           |
| 82127804     | Granted     | 5675480       | 5/29/1996   | 10/7/1997  | 08/654863          | US | MICROPROCESSOR CONTROL OF PARALLEL POWER SUPPLY SYSTEMS                                                       |
| 82137167     | Granted     | 6011679       | 9/30/1998   | 36529      | 09/163705          | US | METHODS AND APPARATUS FOR CONTROLLING A POWER SUPPLY WITH IMPROVED TECHNIQUES FOR PROVIDING PROTECTION LIMITS |
| 82172132     | Granted     | 7102357       | 3/22/2004   | 9/5/2006   | 10/805942          | US | Determination Of Worst Case Voltage In A Power Supply Loop                                                    |
| 82174751     | Granted     | 7379303       | 10/22/2003  | 39595      | 10/690789          | US | Computing Device Module                                                                                       |
| 82181744     | Granted     | 7382624       | 10/22/2004  | 39602      | 10/971375          | US | Power Supply Including Multiple AC Receptacles                                                                |
| 82182431     | Granted     | 7602625       | 1/26/2007   | 40099      | 11/627618          | US | SYSTEMS AND METHODS FOR SEPARATION OF A FRONT END RECTIFIER POWER SYSTEM                                      |
| 82182929     | Granted     | 7412614       | 4/29/2004   | 39672      | 10/836018          | US | Power Management Using A Pre-determined Thermal Characteristic Of A Memory Module                             |
| 82199909     | Granted     | 7514816       | 5/19/2005   | 39910      | 11/133122          | US | Output Current Threshold Adjustment For A Power Supply                                                        |
| 82207091     | Granted     | 7400067       | 10/31/2005  | 7/15/2008  | 11/264244          | US | Operation Of A Redundant Power Supply Without Isolation Devices                                               |
| 82227629     | Granted     | 7692910       | 3/29/2007   | 4/6/2010   | 11/729646          | US | FAILURE DETECTION IN A VOLTAGE REGULATOR                                                                      |
| 82250732     | Granted     | 7939967       | 6/25/2009   | 5/10/2011  | 12/491773          | US | MULTIPLE POWER SUPPLY CONTROL                                                                                 |
| 82251227     | Granted     | 8312300       | 7/31/2009   | 11/13/2012 | 12/533890          | US | Limiting Power In Redundant Power Supply Systems (as amended)                                                 |
| 82260470     | Granted     | 8533528       | 12/16/2009  | 9/10/2013  | 12/639801          | US | Fault Tolerant Power Sequencer                                                                                |
| 82844854     | Granted     | 9098276       | 9/21/2011   | 8/4/2015   | 13/237994          | US | REDUNDANT POWER SUPPLY SYSTEMS AND METHODS                                                                    |
| 82891343     | Granted     | 9116676       | 6/23/2009   | 8/25/2015  | 13/320947          | US | Power Distribution To Computer System                                                                         |
| 82891366     | Published   |               | 6/25/2009   |            | 13/320657          | US | Systems And Methods For Delivering Power                                                                      |
| 83140720     | Published   |               | 10/26/2010  |            | 13/808132          | US | BACKUP POWER SUPPLY SYSTEMS AND METHODS                                                                       |
| 83747182     | Allowed     |               | 7/20/2011   |            | 14/127950          | US | POWER SUPPLY SYSTEM WITH DYNAMIC FILTERING                                                                    |
| 83996161     | Application |               | 4/20/2012   |            | 14/376134          | US | OVERVOLTAGE PROTECTION SYSTEMS AND METHOD                                                                     |
| 84306422     | Application |               | 2/28/2013   |            | 14/764571          | US | THREE-PHASE PARALLEL POWER CONVERTER LOAD ADJUSTMENT                                                          |
| 81992138     | Granted     | 6643128       | 7/13/2001   | 11/4/2003  | 09/904928          | US | Method And System For Controlling A Cooling Fan Within A Computer System                                      |
| 81993389     | Granted     | 7577862       | 3/30/2005   | 8/18/2009  | 11/095826          | US | Self Adjusting Clocks In Computer Systems That Adjust In Response To Changes In Their Environment             |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------|
| 82005371     | Granted   | 7096926       | 4/22/2004   | 8/29/2006  | 10/831059          | US | Thermal Pouch Interface                                                                                |
| 82024040     | Granted   | 6133631       | 5/30/1997   | 10/17/2000 | 08/866898          | US | Semiconductor Package Lid With Internal Heat Pipe                                                      |
| 82133669     | Granted   | 6349035       | 9/29/2000   | 2/19/2002  | 09/675282          | US | METHOD AND APPARATUS FOR TOOLESS MATING OF LIP JOINTS                                                  |
|              |           |               |             |            |                    |    | COOLED COLD PLATE WITH TAPERED INTERPOSER HEAT TRANSFER                                                |
| 82179869     | Granted   | 7054721       | 1/15/2004   | 5/30/2006  | 10/759781          | US | COMPUTER FAN EFFICIENCY FEEDBACK SYSTEM AND METHOD                                                     |
| 82182869     | Granted   | 7184268       | 1/10/2005   | 2/27/2007  | 11/033083          | US | DYNAMICALLY ADAPTABLE ELECTRONICS COOLING FAN                                                          |
| 82235993     | Granted   | 8475246       | 9/25/2008   | 7/2/2013   | 12/237946          | US | Airflow Damper That Accommodates A Device                                                              |
| 82237745     | Granted   | 7817430       | 6/12/2008   | 10/19/2010 | 12/138189          | US | Airflow Adjustment In An Electronic Module Enclosure                                                   |
| 82238246     | Granted   | 8140196       | 5/14/2008   | 3/20/2012  | 12/153124          | US | Method Of Controlling Temperature Of A Computer System                                                 |
| 82238927     | Granted   | 8144458       | 6/13/2008   | 3/27/2012  | 12/138622          | US | Component Layout In An Enclosure                                                                       |
| 82238933     | Granted   | 8117012       | 6/16/2008   | 2/14/2012  | 12/213146          | US | Method For Determining Cooling Requirements Of A Computer System Enclosure                             |
| 82853095     | Published |               | 1/26/2010   |            | 13/258994          | US | Heat Sink With Multiple Vapor Chambers                                                                 |
| 83854687     | Published |               | 10/28/2011  |            | 14/350069          | US | Fan Impeller with Multiple Blades Shaped and Disposed to Provide High Air-Power Efficiency             |
| 83995723     | Published |               | 2/9/2012    |            | 14/376124          | US | HEAT DISSIPATING SYSTEM                                                                                |
| 83995740     | Published |               | 3/12/2012   |            | 14/376138          | US | LIQUID TEMPERATURE CONTROL COOLING                                                                     |
| 84141854     | Published |               | 1/23/2015   |            | 14/604096          | US | FLEXIBLE REDUNDANT COOLING FOR COMPUTER SYSTEMS                                                        |
| 82275641     | Published |               | 2/25/2011   |            | 13/035680          | US | DASHBOARD OBJECT VALIDATION                                                                            |
| 82048760     | Granted   | 6236537       | 5/18/1999   | 5/22/2001  | 09/313889          | US | Wear Resistant Magnetic Write Head                                                                     |
| 81957548     | Granted   | 5748936       | 5/30/1996   | 5/5/1998   | 08/655655          | US | METHOD AND SYSTEM FOR SUPPORTING SPECULATIVE EXECUTION USING A SPECULATIVE LOOK-ASIDE TABLE            |
| 81974156     | Granted   | 6961796       | 7/26/2001   | 11/1/2005  | 09/915510          | US | EXTENDABLE BUS INTERFACE                                                                               |
| 81974780     | Granted   | 6829700       | 12/29/2000  | 12/7/2004  | 09/751327          | US | Circuit And Method For Supporting Misaligned Accesses In The Presence Of Speculative Load Instructions |
| 81981650     | Granted   | 7236915       | 8/9/2001    | 6/26/2007  | 09/927156          | US | TECHNIQUE AND INTERFACE FOR COMPUTER SYSTEM RESOURCE ASSIGNMENT                                        |
| 81986702     | Granted   | 6525936       | 4/30/2001   | 2/25/2003  | 09/845545          | US | AIR JET COOLING ARRANGEMENT FOR ELECTRONIC SYSTEMS                                                     |
| 81986708     | Granted   | 6926078       | 9/30/2003   | 8/9/2005   | 10/673149          | US | Multi-Load Thermal Regulating System With Multiple Serial Evaporators                                  |
| 81989453     | Granted   | 6931571       | 11/20/2001  | 8/16/2005  | 09/991575          | US | Method And Apparatus For Handling Transient Memory Errors                                              |
| 81989456     | Granted   | 7020800       | 1/24/2002   | 3/28/2006  | 10/057124          | US | System And Method For Memory Failure Recovery Using Lockstep Processes                                 |
| 82079483     | Granted   | 9009004       | 1/31/2002   | 4/14/2015  | 10/066051          | US | Generating Interconnect Fabric Requirements                                                            |

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| 82082729     | Granted | 6868682       | 1/16/2003   | 3/22/2005  | 10/345723          | US | Agent Based Control Method And System For Energy Management                                                                                                            |
| 82088342     | Granted | 7228381       | 11/2/2004   | 6/5/2007   | 10/980649          | US | STORAGE SYSTEM USING FAST STORAGE DEVICES FOR STORING REDUNDANT DATA                                                                                                   |
| 82090781     | Granted | 7400622       | 7/29/2003   | 7/15/2008  | 10/629474          | US | METHOD AND APPARATUS FOR ALLOCATING A TRANSPORT IDENTIFIER FOR A NETWORK DATA CONNECTION                                                                               |
| 82093403     | Granted | 8315975       | 12/9/2002   | 11/20/2012 | 10/315583          | US | Symbolic Wide-area File System And Method                                                                                                                              |
| 82100084     | Granted | 7170745       | 4/30/2003   | 1/30/2007  | 10/425624          | US | Electronics Rack Having An Angled Panel                                                                                                                                |
| 82105697     | Granted | 6982570       | 10/30/2003  | 1/3/2006   | 10/698271          | US | Reconfigurable Device                                                                                                                                                  |
| 82120310     | Granted | 6816977       | 12/3/2001   | 11/9/2004  | 10/004718          | US | POWER REDUCTION IN COMPUTING DEVICES USING MICRO-SLEEP INTERVALS                                                                                                       |
| 82136228     | Granted | 6148396       | 11/26/1997  | 11/14/2000 | 08/980170          | US | APPARATUS FOR SAMPLING PATH HISTORY IN A PROCESSOR PIPELINE                                                                                                            |
| 82136357     | Granted | 6145056       | 6/8/1998    | 36837      | 09/093222          | US | METHOD AND APPARATUS FOR CACHING THE RESULTS OF FUNCTION APPLICATIONS WITH DYNAMIC, FINE-GRAINED DEPENDENCIES                                                          |
| 82170566     | Granted | 7051946       | 5/29/2003   | 5/30/2006  | 10/446854          | US | AIR RE-CIRCULATION INDEX                                                                                                                                               |
| 82175189     | Granted | 7127625       | 9/4/2003    | 10/24/2006 | 10/654473          | US | Application Management Based On Power Consumption                                                                                                                      |
| 82176497     | Granted | 8117092       | 7/9/2003    | 40953      | 10/614856          | US | Inventory Management Of Components                                                                                                                                     |
| 82176500     | Granted | 7194337       | 10/31/2003  | 3/20/2007  | 10/697692          | US | Agent-based Operation Of A Robotic Device                                                                                                                              |
| 82178993     | Granted | 7236896       | 9/30/2003   | 39259      | 10/673134          | US | LOAD MANAGEMENT IN A POWER SYSTEM                                                                                                                                      |
| 82181996     | Granted | 8145731       | 12/17/2003  | 3/27/2012  | 10/738273          | US | System And Method For Determining How Many Servers Of At Least One Server Configuration To Be Included At A Service Providers Site For Supporting An Expected Workload |
| 82183367     | Granted | 7155318       | 11/5/2004   | 12/26/2006 | 10/981487          | US | Air Conditioning Unit Control To Reduce Moisture Varying Operations                                                                                                    |
| 82184363     | Granted | 7266716       | 10/23/2003  | 9/4/2007   | 10/693743          | US | METHOD AND RECOVERY OF DATA USING ERASURE CODED DATA FROM STRIPE BLOCKS                                                                                                |
| 82185614     | Granted | 7877747       | 2/20/2004   | 1/25/2011  | 10/784065          | US | Flexible Operating System Operable As Either Native Or As Virtualized                                                                                                  |
| 82185800     | Granted | 8365181       | 7/12/2004   | 41303      | 10/889598          | US | Method And System For Guiding Scheduling Decisions In Clusters Of Computers Using Dynamic Job Profiling                                                                |
| 82188488     | Granted | 7197433       | 4/9/2004    | 39168      | 10/820786          | US | Workload Placement Among Data Centers Based On Thermal Efficiency                                                                                                      |
| 82194107     | Granted | 8364829       | 9/24/2004   | 41303      | 10/950025          | US | System And Method For Ascribing Resource Consumption To Activity In A Causal Path Of A Node Distributed Computing System                                               |
| 82197662     | Granted | 7347058       | 10/21/2004  | 39532      | 10/970889          | US | VENT FOR A DATA CENTER COOLING SYSTEM                                                                                                                                  |

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| 82197722     | Granted | 7584021       | 2/21/2007   | 40057      | 11/708831          | US | Energy Efficient CRAC Unit Operation Using Heat Transfer Levels                                                                                                |
| 82198166     | Granted | 7447920       | 8/31/2004   | 39756      | 10/929448          | US | Workload Placement Based On Thermal Considerations                                                                                                             |
| 82204964     | Granted | 8626918       | 5/16/2005   | 41646      | 11/129987          | US | Workload Allocation Based Upon Heat Re-circulation Capabilities                                                                                                |
| 82206152     | Granted | 7779424       | 3/2/2005    | 8/17/2010  | 11/070674          | US | System And Method For Attributing To A Corresponding Virtual Machine CPU Usage Of An Isolated Driver Domain In Which A Shared Resource's Device Driver Resides |
| 82206155     | Granted | 7720771       | 6/24/2005   | 40316      | 11/165810          | US | Method Of Dividing Past Computing Instances Into Predictable And Unpredictable Sets And Method Of Predicting Computing Value                                   |
| 82208588     | Granted | 8230059       | 11/8/2005   | 41114      | 11/270137          | US | Method Of Monitoring Resource Usage In Computing Environment                                                                                                   |
| 82208774     | Granted | 8732368       | 2/17/2005   | 41779      | 11/061959          | US | Conjoined-core Chip Multiprocessor Control System                                                                                                              |
| 82212644     | Granted | 7349828       | 2/15/2006   | 39532      | 11/354446          | US | Estimating An Electronic Device Condition                                                                                                                      |
| 82212647     | Granted | 7647516       | 9/22/2005   | 40190      | 11/232526          | US | Power Consumption Management Among Compute Nodes                                                                                                               |
| 82214828     | Granted | 8903888       | 10/27/2006  | 41975      | 11/588683          | US | Retrieving Data Of A Virtual Machine Based On Demand To Migrate The Virtual Machine Between Physical Machines                                                  |
| 82214831     | Granted | 9092250       | 10/27/2006  | 42213      | 11/588691          | US | Selecting One Of Plural Layouts Of Virtual Machines On Physical Machines                                                                                       |
| 82215146     | Granted | 8990270       | 8/3/2006    | 42087      | 11/498344          | US | Protocol Virtualization For A Network File System                                                                                                              |
| 82223384     | Granted | 7872502       | 7/12/2006   | 40561      | 11/484961          | US | Defect-and-failure-tolerant Demultiplexer Using Series Replication And Error-control Encoding                                                                  |
| 82224512     | Granted | 7877167       | 12/26/2006  | 1/25/2011  | 11/645400          | US | Reducing Vibration In An Electronic System                                                                                                                     |
| 82225445     | Granted | 8683000       | 10/27/2006  | 3/25/2014  | 11/553976          | US | Virtual Network Interface System With Memory Management                                                                                                        |
| 82229003     | Granted | 8249841       | 1/29/2007   | 8/21/2012  | 11/699402          | US | Computerized Tool For Assessing Conditions In A Room                                                                                                           |
| 82229189     | Granted | 7615857       | 2/14/2007   | 40127      | 11/706742          | US | Modular Three-dimensional Chip Multiprocessor                                                                                                                  |
| 82229192     | Granted | 7811865       | 10/7/2009   | 10/12/2010 | 12/575070          | US | METHOD OF FORMING A PACKAGED CHIP MULTIPROCESSOR                                                                                                               |
| 82229813     | Granted | 7685323       | 7/31/2007   | 3/23/2010  | 11/830954          | US | Automatic Configuration Of Devices In A Network                                                                                                                |
| 82230125     | Granted | 8185913       | 7/31/2007   | 5/22/2012  | 11/888343          | US | Manageability Platform In An Unified System                                                                                                                    |
| 82234061     | Granted | 8028743       | 10/10/2008  | 10/4/2011  | 12/249568          | US | Passive Cooling In Response To Ambient Environmental Properties                                                                                                |
| 82235057     | Granted | 8335434       | 10/23/2008  | 12/18/2012 | 12/682918          | US | All Optical Fast Distributed Arbitration In A Computer System Device                                                                                           |
| 82239869     | Granted | 8281151       | 10/1/2008   | 10/2/2012  | 12/243134          | US | Auditor Assisted Extraction And Verification Of Client Data Returned From A Storage Provided While Hiding Client Data From The Auditor                         |
| 82241303     | Granted | 8626889       | 2/22/2008   | 1/7/2014   | 12/864206          | US | Detecting Anomalies In A Sensor Networked Environment                                                                                                          |

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| 82242866     | Granted   | 8533478       | 10/24/2008  | 9/10/2013  | 12/258273          | US | System For And Method Of Writing And Reading Redundant Data                                                        |
| 82244612     | Granted   | 8145455       | 9/30/2008   | 3/27/2012  | 12/241874          | US | Predicting Resource Usage Of An Application In A Virtual Environment                                               |
| 82244615     | Granted   | 8131519       | 9/30/2008   | 3/6/2012   | 12/241913          | US | Improving Accuracy In A Prediction Of Resource Usage Of An Application In A Virtual Environment                    |
| 82246610     | Granted   | 9009061       | 4/27/2009   | 4/14/2015  | 12/430303          | US | COOLING RESOURCE CAPACITY ALLOCATION BASED ON OPTIMIZATION OF COST FUNCTION WITH LAGRANGE MULTIPLIERS (as amended) |
| 82247486     | Granted   | 8255522       | 3/6/2009    | 8/28/2012  | 12/399488          | US | Event Detection From Attributes Read By Entities                                                                   |
| 82248605     | Granted   | 8990801       | 1/30/2009   | 3/24/2015  | 12/362876          | US | Server Switch Integration In A Virtualized System                                                                  |
| 82249292     | Granted   | 8355828       | 3/13/2009   | 1/15/2013  | 12/404019          | US | Determining Optimal Settings For Resource Actuators                                                                |
| 82249478     | Granted   | 8907462       | 2/5/2009    | 12/9/2014  | 12/366234          | US | Integrated Circuit Package                                                                                         |
| 82250981     | Granted   | 8589370       | 7/16/2009   | 11/19/2013 | 13/382094          | US | Acronym Extraction                                                                                                 |
| 82258475     | Granted   | 8856247       | 8/18/2009   | 10/7/2014  | 13/258466          | US | Communicating Electronic Mail                                                                                      |
| 82258910     | Granted   | 8335749       | 1/28/2010   | 12/18/2012 | 12/695788          | US | GENERATING A SET OF ATOMS                                                                                          |
| 82259030     | Granted   | 8620843       | 1/29/2010   | 12/31/2013 | 12/697198          | US | PATTERN RECOGNITION USING ACTIVE MEDIA                                                                             |
| 82259531     | Granted   | 8447569       | 9/15/2009   | 5/21/2013  | 12/560278          | US | Determining Sustainability Of A Data Center                                                                        |
| 82259654     | Published |               | 1/14/2010   |            | 12/687361          | US | SCRUBBING PROCEDURE FOR A DATA STORAGE SYSTEM                                                                      |
| 82261157     | Granted   | 8627143       | 7/12/2010   | 41646      | 12/834603          | US | Dynamically Modeling And Selecting A Checkpoint Scheme Based Upon An Application Workload                          |
| 82261466     | Granted   | 8727843       | 7/2/2010    | 41779      | 12/829715          | US | Self-powered Fluid Control Apparatus                                                                               |
| 82261781     | Granted   | 8441620       | 4/5/2010    | 41408      | 12/754027          | US | DETERMINING DISTANCE BETWEEN NODES                                                                                 |
| 82263341     | Granted   | 8392628       | 7/16/2010   | 41338      | 12/838256          | US | Sharing Memory Spaces For Access By Hardware And Software In A Virtual Machine Environment                         |
| 82264214     | Published |               | 10/29/2010  |            | 12/916292          | US | GENERATING A RESOURCE MANAGEMENT PLAN FOR AN INFRASTRUCTURE                                                        |
| 82275824     | Granted   | 8725868       | 5/18/2011   | 5/13/2014  | 13/110539          | US | INTERACTIVE SERVICE MANAGEMENT                                                                                     |
| 82573379     | Published |               | 6/17/2008   |            | 12/999615          | US | Infrastructure System Management Based Upon Evaluated Reliability                                                  |
| 82595729     | Published |               | 6/17/2011   |            | 13/162946          | US | METHOD AND SYSTEM OF ORGANIZING A HETEROGENEOUS MEMORY ARCHITECTURE                                                |
| 82618414     | Granted   | 8375012       | 8/10/2011   | 2/12/2013  | 13/206759          | US | Computer Indexes with Multiple Representations                                                                     |
| 82635852     | Granted   | 8561418       | 1/31/2011   | 10/22/2013 | 13/018082          | US | Refrigeration System With Parallel Evaporators And Variable Speed Compressor                                       |
| 82670296     | Granted   | 9053438       | 7/24/2011   | 6/9/2015   | 13/189531          | US | ENERGY CONSUMPTION ANALYSIS USING NODE SIMILARITY                                                                  |
| 82692039     | Granted   | 8938169       | 10/31/2008  | 1/20/2015  | 13/126747          | US | Prioritized Optical Arbitration Systems And Methods                                                                |
| 82733556     | Granted   | 9146867       | 10/31/2011  | 9/29/2015  | 13/285735          | US | METHODS AND APPARATUS TO ACCESS MEMORY USING RUNTIME CHARACTERISTICS (as amended)                                  |

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| 82840838     | Published   |               | 3/13/2009   |            | 13/256380          | US | Determining Status Assignments That Optimize Entry Utilization And Resource Power Consumption                                                                       |
| 82852385     | Granted     | 8600108       | 1/25/2010   | 12/3/2013  | 13/258495          | US | Data Processing System And Method                                                                                                                                   |
| 82853132     | Published   |               | 2/25/2010   |            | 13/259249          | US | Optimization Method And Apparatus                                                                                                                                   |
| 82906179     | Published   |               | 1/9/2012    |            | 13/346052          | US | System And Method For Determining How Many Servers At Least One Server Configuration To Be Included At A Service Providers Site For Supporting An Expected Workload |
|              |             |               |             |            |                    |    |                                                                                                                                                                     |
| 82925927     | Granted     | 8938589       | 1/28/2010   | 42024      | 13/386396          | US | Interface Methods And Apparatus For Memory Devices                                                                                                                  |
| 82929800     | Granted     | 8924645       | 3/7/2011    | 42003      | 13/387718          | US | DATA STORAGE APPARATUS AND METHODS                                                                                                                                  |
| 82981808     | Published   |               | 6/18/2012   |            | 13/525820          | US | DETERMINING AN ALLOCATION OF RESOURCES TO A PROGRAM HAVING CONCURRENT JOBS                                                                                          |
| 82996730     | Published   |               | 7/31/2012   |            | 13/563153          | US | DETERMINING A NUMBER OF STORAGE DEVICES TO BACKUP OBJECTS IN VIEW OF QUALITY OF SERVICE CONSIDERATIONS                                                              |
|              |             |               |             |            |                    |    |                                                                                                                                                                     |
| 83108878     | Granted     | 9053024       | 11/30/2012  | 42164      | 13/690353          | US | TRANSACTIONS AND FAILURE                                                                                                                                            |
| 83140949     | Granted     | 9152469       | 1/28/2013   | 10/6/2015  | 13/752229          | US | OPTIMIZING EXECUTION AND RESOURCE USAGE IN LARGE SCALE COMPUTING                                                                                                    |
|              |             |               |             |            |                    |    |                                                                                                                                                                     |
| 83206041     | Published   |               | 5/24/2013   |            | 13/902366          | US | MULTI-LEVEL CACHE TRACKING TABLE                                                                                                                                    |
| 83209848     | Published   |               | 4/30/2013   |            | 13/874272          | US | POWER INFRASTRUCTURE SIZING AND WORKLOAD MANAGEMENT                                                                                                                 |
| 83209894     | Allowed     |               | 5/30/2013   |            | 13/905235          | US | PERSISTENT MEMORY GARBAGE COLLECTION                                                                                                                                |
| 83680936     | Published   |               | 3/16/2011   |            | 14/005193          | US | SYSTEMS AND METHODS FOR FINE GRANULARITY MEMORY SPARING                                                                                                             |
| 83789137     | Published   |               | 9/14/2011   |            | 14/343010          | US | IMPARTING DURABILITY TO A TRANSACTIONAL MEMORY SYSTEM                                                                                                               |
| 84028830     | Published   |               | 3/2/2012    |            | 14/381854          | US | SHIFTABLE MEMORY DEFRAGMENTATION                                                                                                                                    |
| 84077675     | Published   |               | 5/31/2012   |            | 14/396327          | US | LOCAL ERROR DETECTION AND GLOBAL ERROR CORRECTION                                                                                                                   |
| 84080855     | Published   |               | 4/30/2012   |            | 14/396321          | US | Determining Virtual Machine Placement                                                                                                                               |
| 84118250     | Published   |               | 6/28/2012   |            | 14/408512          | US | Multi-Level Cell Memory                                                                                                                                             |
| 84137065     | Published   |               | 7/31/2012   |            | 14/417233          | US | SYSTEMS AND METHODS FOR CONTROLLING ACCESS TO A SHARED DATA STRUCTURE WITH READER-WRITER LOCKS USING MULTIPLE SUB-LOCKS                                             |
| 84201018     | Published   |               | 9/28/2012   |            | 14/431187          | US | System and Method for Dynamically Selecting Between Memory Error Detection and Error Correction                                                                     |
| 84223036     | Application |               | 4/22/2015   |            | 14/437684          | US | Selective Error Correcting Code and Memory Access Granularity Switching                                                                                             |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 84289568     | Application |               | 6/18/2015   |            | 14/743424          | US | Selecting One Of Plural Layouts Of Virtual Machines On Physical Machines                                                                              |
| 84304135     | Application |               | 1/9/2013    |            | 14/759658          | US | Characterizing Risks in Resource Distribution Systems                                                                                                 |
| 82049567     | Granted     | 6484275       | 11/26/1999  | 11/19/2002 | 09/449793          | US | System And Method For Interfacing Data With A Test Access Port Of A Processor                                                                         |
| 82050506     | Granted     | 6518156       | 4/25/2000   | 2/11/2003  | 09/558955          | US | Configurable Nanoscale Crossbar Electronic Circuits Made By Electrochemical Reaction                                                                  |
| 82051316     | Granted     | 6276769       | 4/30/1999   | 8/21/2001  | 09/302380          | US | INNER WINDOW FOR A BEZEL OR HOUSING ASSEMBLY                                                                                                          |
| 82055057     | Granted     | 6671802       | 4/13/2000   | 12/30/2003 | 09/549140          | US | PERFORMANCE OPTIMIZATION OF COMPUTER SYSTEM BY DYNAMICALLY AND IMMEDIATELY UPDATING A CONFIGURATION SETTING BASED ON DETECTED CHANGE IN PREFERRED USE |
|              |             |               |             |            |                    |    | OPTIMIZED ROUTING STRATEGY FOR MULTIPLE SYNCHRONOUS BUS GROUPS                                                                                        |
| 82058678     | Granted     | 6662250       | 2/25/2000   | 12/9/2003  | 09/512786          | US | WRITE POSTING WITH GLOBAL ORDERING IN MULTI-PATH SYSTEMS                                                                                              |
| 82058996     | Granted     | 6636928       | 2/18/2000   | 10/21/2003 | 09/507205          | US | Transmitting Messages Over A Network                                                                                                                  |
| 82067237     | Granted     | 6438691       | 3/27/1997   | 8/20/2002  | 09/155596          | US | Electronic Assembly With Integrated Circuit Devices Including Lock Circuitry                                                                          |
| 82071539     | Granted     | 5764761       | 5/7/1996    | 6/9/1998   | 08/646165          | US | Encoded Multi-access Bus System And Method                                                                                                            |
| 82080095     | Granted     | 7302020       | 5/20/2002   | 11/27/2007 | 10/151572          | US | System And Method Of Optimizing Memory Usage With Data Lifetimes                                                                                      |
| 82080344     | Granted     | 7363459       | 10/31/2002  | 4/22/2008  | 10/284844          | US | MEMORY STRUCTURES                                                                                                                                     |
| 82082534     | Granted     | 6717215       | 6/21/2002   | 4/6/2004   | 10/177240          | US | Hierarchical Categorization Method And System With Automatic Local Selection Of Classifiers                                                           |
| 82082846     | Granted     | 7349917       | 10/1/2002   | 3/25/2008  | 10/262742          | US | HEAT SINK APPARATUS UTILIZING THE HEAT SINK SHROUD TO DISSIPATE HEAT                                                                                  |
| 82083221     | Granted     | 6646341       | 2/20/2002   | 11/11/2003 | 10/080010          | US | Clock Gater Circuit                                                                                                                                   |
| 82085714     | Granted     | 6809570       | 1/21/2003   | 10/26/2004 | 10/347778          | US | Need-based Filtering For Rapid Selection Of Devices In A Tree Topology Network                                                                        |
| 82085900     | Granted     | 7313101       | 12/20/2002  | 12/25/2007 | 10/327335          | US | Estimating Utilization Of An Electronic System Component                                                                                              |
| 82088336     | Granted     | 6810361       | 6/19/2002   | 10/26/2004 | 10/176423          | US | SUPPORT ASSEMBLY FOR AN INTEGRATED CIRCUIT PACKAGE HAVING SOLDER COLUMNS                                                                              |
| 82089713     | Granted     | 6791184       | 7/23/2002   | 9/14/2004  | 10/202416          | US | PLATFORM AND METHOD FOR MONITORING AND ANALYZING DATA                                                                                                 |
| 82090145     | Granted     | 7222121       | 11/21/2002  | 5/22/2007  | 10/302182          | US | Computer Program Product And Method Of Simulating Circuits Using A Balanced, Lossy, Transmission Line Circuit Model                                   |
| 82094144     | Granted     | 7212960       | 2/13/2003   | 5/1/2007   | 10/365808          | US | System, Method And Computer Readable Medium For Compressing A Data Sequence For Partial Decompressing                                                 |
| 82095581     | Granted     | 6819272       | 11/6/2002   | 11/16/2004 | 10/289752          | US |                                                                                                                                                       |

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| 82095956     | Granted | 6747872       | 2/28/2003   | 6/8/2004   | 10/375003          | US | Pressure Control Of Cooling Fluid Within A Plenum                                                                            |
| 82098641     | Granted | 7493226       | 6/26/2003   | 2/17/2009  | 10/606714          | US | Method And Construct For Enabling Programmable, Integrated System Margin Testing                                             |
| 82098887     | Granted | 7581187       | 8/7/2003    | 8/25/2009  | 10/636082          | US | Reusable High Level Graphical User Interface Template                                                                        |
| 82100327     | Granted | 7365574       | 8/19/2005   | 4/29/2008  | 11/207635          | US | General Purpose Delay Logic                                                                                                  |
| 82101572     | Granted | 7424397       | 8/6/2003    | 9/9/2008   | 10/635083          | US | General Purpose Performance Counter                                                                                          |
| 82101695     | Granted | 7313731       | 11/3/2003   | 12/25/2007 | 10/700289          | US | Systems And Methods For Identifying Erroneous Transactions                                                                   |
| 82102382     | Granted | 6717443       | 11/4/2002   | 4/6/2004   | 10/287308          | US | Method And Apparatus For Mitigating The Hysteresis Effect In A Sensing Circuit                                               |
| 82103255     | Granted | 7281171       | 1/14/2003   | 10/9/2007  | 10/341846          | US | System And Method Of Checking A Computer System For Proper Operation                                                         |
| 82103258     | Granted | 7299331       | 1/21/2003   | 11/20/2007 | 10/348181          | US | METHOD AND APPARATUS FOR ADDING MAIN MEMORY IN COMPUTER SYSTEMS OPERATING WITH MIRRORED MAIN MEMORY                          |
| 82103942     | Granted | 6940288       | 6/4/2003    | 9/6/2005   | 10/453595          | US | Apparatus And Method For Monitoring And Predicting Failures In System Interconnect                                           |
| 82104011     | Granted | 6879270       | 8/20/2003   | 4/12/2005  | 10/644282          | US | Data Compression In Multiprocessor Computers                                                                                 |
| 82105319     | Granted | 7401269       | 5/10/2003   | 7/15/2008  | 10/435147          | US | Systems And Methods For Scripting Data Errors To Facilitate Verification Of Error Detection Or Correction Code Functionality |
| 82106567     | Granted | 7184933       | 2/28/2003   | 2/27/2007  | 10/376533          | US | Performance Estimation Tool For Data Storage Systems                                                                         |
| 82110374     | Granted | 6115826       | 9/15/1998   | 9/5/2000   | 09/153056          | US | INTERVAL -TIMING FACILITY USING OVERBUILT HIERARCHICAL TIMING WHEELS                                                         |
| 82110752     | Granted | 6671704       | 3/11/1999   | 12/30/2003 | 09/267032          | US | METHOD AND APPARATUS FOR HANDLING FAILURES OF RESOURCE MANAGERS IN A CLUSTERED ENVIRONMENT                                   |
| 82116554     | Granted | 6625610       | 1/20/2000   | 9/23/2003  | 09/488045          | US | METHOD AND APPARATUS FOR ACCESSING TRANSACTION SERVICES USING OBJECT LINKING AND EMBEDDING                                   |
| 82117553     | Granted | 6711695       | 1/26/2001   | 3/23/2004  | 09/770590          | US | PECL VOLTAGE DIMM WITH REMOTE MULTI-MODULE ETCH SKEW COMPENSATION                                                            |
| 82117616     | Granted | 6874103       | 11/13/2001  | 3/29/2005  | 10/013748          | US | ADAPTER-BASED RECOVERY SERVER OPTION                                                                                         |
| 82118051     | Granted | 6832282       | 7/1/2003    | 12/14/2004 | 10/611569          | US | SYSTEM AND METHOD FOR PROVIDING FORWARD PROGRESS AND AVOIDING STARVATION AND LIVELOCK IN A MULTIPROCESSOR COMPUTER SYSTEM    |
| 82118243     | Granted | 6931626       | 1/17/2001   | 8/16/2005  | 09/764526          | US | METHOD AND APPARATUS FOR VERSIONING STATICALLY BOUND FILES                                                                   |
| 82118681     | Granted | 7287107       | 1/4/2002    | 10/23/2007 | 10/037502          | US | METHOD AND APPARATUS FOR PASSIVE PCI THROTTLING IN A REMOTE SERVER MANAGEMENT CONTROLLER                                     |
| 82120055     | Granted | 6633486       | 11/28/2001  | 10/14/2003 | 09/995887          | US | LOW PROFILE LATCH ACTIVATOR                                                                                                  |

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| 82120112     | Granted | 6772231       | 6/1/2001    | 8/3/2004   | 09/872971          | US | STRUCTURE AND PROCESS FOR DISTRIBUTING SCSI LUN SEMANTICS ACROSS PARALLEL DISTRIBUTED COMPONENTS                                                          |
| 82120493     | Granted | 6657867       | 12/14/2001  | 12/2/2003  | 10/017102          | US | HINGED DOOR FOR ACCESS TO ADD-IN CARDS                                                                                                                    |
| 82121924     | Granted | 6754074       | 9/9/2002    | 6/22/2004  | 10/238010          | US | MULTIPURPOSE SERVER HANDLE                                                                                                                                |
| 82122047     | Granted | 6717806       | 6/25/2002   | 4/6/2004   | 10/178990          | US | COMPONENT ALIGNMENT AND RETENTION MECHANISM                                                                                                               |
| 82127231     | Granted | 6185628       | 1/26/1999   | 2/6/2001   | 09/237636          | US | CONTROLLERLESS MODEM WITH GENERAL PURPOSE COMPUTER EXECUTING MODEM CONTROLLER CODE AND VIRTUALIZED UART COMMUNICATING DATA TO/FROM MODEM CONTROLLER CODE  |
| 82127234     | Granted | 6799225       | 2/6/2001    | 9/28/2004  | 09/778511          | US | CONTROLLERLESS MODEM                                                                                                                                      |
| 82128293     | Granted | 6199133       | 7/21/1999   | 3/6/2001   | 08/624176          | US | MANAGEMENT COMMUNICATION BUS FOR NETWORKING DEVICES                                                                                                       |
| 82129727     | Granted | 5933158       | 9/9/1997    | 8/3/1999   | 08/926426          | US | USE OF A LINK BIT TO FETCH ENTIRES OF A GRAPHIC ADDRESS REMAPPING TABLE                                                                                   |
| 82130354     | Granted | 5878237       | 7/11/1997   | 3/2/1999   | 08/893849          | US | APPARATUS, METHOD AND SYSTEM FOR A COMPUTER CPU AND MEMORY TO PCI BRIDGE HAVING A PLURALITY OF PHYSICAL PCI BUSES                                         |
| 82130357     | Granted | 5923860       | 6/25/1997   | 7/13/1999  | 08/882090          | US | APPARATUS, METHOD AND SYSTEM FOR REMOTE PERIPHERAL COMPONENT INTERCONNECT BUS USING ACCELERATED GRAPHICS PORT LOGIC CIRCUITS                              |
| 82130855     | Granted | 6243756       | 5/14/1998   | 6/5/2001   | 09/078550          | US | NETWORK DEVICE WITH UNIFIED MANAGEMENT                                                                                                                    |
| 82133288     | Granted | 6795894       | 8/8/2000    | 9/21/2004  | 09/534055          | US | FAST DISK CACHE WRITING SYSTEM                                                                                                                            |
| 82133348     | Granted | 6618821       | 1/12/2000   | 37873      | 09/481954          | US | FAULT TOLERANT NETWORK SERVER HAVING MULTIPLE SLIDEABLY-MOUNTED PROCESSING ELEMENTS SHARING A REDUNDANT ARRAY OF INDEPENDENT DISKS THROUGH SCSI ISOLATORS |
| 82133414     | Granted | 6581130       | 4/4/2000    | 6/17/2003  | 09/542420          | US | DYNAMIC REMAPPING OF ADDRESS REGISTERS FOR ADDRESS TRANSLATION BETWEEN MULTIPLE BUSES                                                                     |
| 82133723     | Granted | 6636929       | 4/6/2000    | 10/21/2003 | 09/544573          | US | USB VIRTUAL DEVICES                                                                                                                                       |
| 82135223     | Granted | 5805803       | 5/13/1997   | 9/8/1998   | 08/855025          | US | SECURE WEB TUNNEL                                                                                                                                         |
| 82135907     | Granted | 5886862       | 11/26/1997  | 3/23/1999  | 08/979376          | US | CROSS-REFERENCED ELECTROSTATIC DISCHARGE PROTECTION SYSTEMS AND METHODS FOR POWER SUPPLIES                                                                |
| 82135910     | Granted | 5999386       | 12/2/1998   | 36501      | 09/203417          | US | CROSS-REFERENCED ELECTROSTATIC DISCHARGE PROTECTION SYSTEMS AND METHODS FOR POWER SUPPLIES                                                                |
| 82135970     | Granted | 6647508       | 6/10/1998   | 11/11/2003 | 09/095543          | US | MULTIPROCESSOR COMPUTER ARCHITECTURE WITH MULTIPLE OPERATING SYSTEM INSTANCES AND SOFTWARE CONTROLLED RESOURCE ALLOCATION                                 |

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| 82136288     | Granted     | 6233645       | 11/2/1998   | 37026      | 09/184623          | US | DYNAMICALLY DISABLING SPECULATIVE PREFETCH WHEN HIGH PRIORITY DEMAND FETCH OPPORTUNITY USE IS HIGH                         |
| 82164695     | Granted     | 5917147       | 1/30/1996   | 36340      | 08/593101          | US | CLIP-ON NON-SNAG GROUNDING FINGER ARRAY                                                                                    |
| 82165064     | Granted     | 6199095       | 1/29/1996   | 3/6/2001   | 08/593590          | US | SYSTEM AND METHOD FOR ACHIEVING OBJECT METHOD TRANSPARENCY IN A MULTI- CODE EXECUTION ENVIRONMENT                          |
| 82165130     | Granted     | 5873127       | 5/3/1996    | 2/16/1999  | 08/646734          | US | UNIVERSAL PTE BACKLINKS FOR PAGE TABLE ACCESSES                                                                            |
| 82166255     | Granted     | 6654902       | 4/11/2000   | 11/25/2003 | 09/546806          | US | PERSISTENT RESERVATION IO BARRIERS                                                                                         |
| 82166318     | Granted     | 6636948       | 4/13/2001   | 10/21/2003 | 09/834551          | US | METHOD AND SYSTEM FOR A PROCESSOR TO GAIN ASSURED OWNERSHIP OF AN UP-TO-DATE COPY OF DATA                                  |
| 82175867     | Granted     | 7296199       | 1/20/2004   | 11/13/2007 | 10/760736          | US | Systems And Methods For Defining And Utilizing Attributes Of A Processor Resource                                          |
| 82178990     | Granted     | 7353498       | 4/29/2004   | 39539      | 10/836013          | US | MULTI-PROCESS DEBUGGER                                                                                                     |
| 82179110     | Granted     | 7403885       | 11/5/2004   | 7/22/2008  | 10/982659          | US | Voltage Supply Noise Analysis                                                                                              |
| 82179425     | Granted     | 7280371       | 1/16/2004   | 39364      | 10/758982          | US | MULTISTAGE MOUNTING PRINTED CIRCUIT BOARD SYSTEM AND METHOD                                                                |
| 82179674     | Granted     | 7434201       | 6/21/2004   | 39728      | 10/872708          | US | Method And Apparatus Providing For Extendable Interaction Between Firmware And Operating Systems On Digital Devices        |
| 82180796     | Granted     | 7398212       | 4/22/2004   | 7/8/2008   | 10/831082          | US | System And Method For Quality Of Service Management Within A Call Handling System                                          |
| 82182047     | Granted     | 7380107       | 1/13/2004   | 5/27/2008  | 10/756640          | US | MULTI-PROCESSOR SYSTEM UTILIZING CONCURRENT SPECULATIVE SOURCE REQUEST AND SYSTEM SOURCE REQUEST IN RESPONSE TO CACHE MISS |
| 82182923     | Granted     | 7380144       | 3/30/2004   | 39595      | 10/812486          | US | Enabling And Disabling Of Powering-off Of Computer System                                                                  |
| 82191350     | Granted     | 7620984       | 10/6/2004   | 40134      | 10/959698          | US | Method Of Managing Computer System                                                                                         |
| 82191596     | Granted     | 7286349       | 11/16/2004  | 10/23/2007 | 10/989924          | US | VENTILATED CASING FOR AN ELECTRONIC DEVICE                                                                                 |
| 82199777     | Granted     | 7437587       | 1/21/2005   | 10/14/2008 | 11/040756          | US | METHOD AND SYSTEM FOR UPDATING A VALUE OF A SLOW REGISTER TO A VALUE OF A FAST REGISTER                                    |
| 82200530     | Granted     | 7734622       | 3/25/2005   | 40337      | 11/090409          | US | Media-driven Browsing                                                                                                      |
| 82211144     | Granted     | 7289868       | 8/22/2005   | 39385      | 11/209134          | US | System And Method For Calculating A Shift Value Between Pattern Instances                                                  |
| 82219073     | Granted     | 7592679       | 10/19/2006  | 40078      | 11/583648          | US | Sensor And Method For Making The Same                                                                                      |
| 82226933     | Granted     | 8046768       | 7/31/2007   | 40841      | 11/888773          | US | Apparatus And Method For Detecting Resource Consumption And Preventing Workload Starvation                                 |
| 82247972     | Application |               | 1/26/2009   |            | 12/360104          | US | A Structure Supporting Growth Of A Nanowire                                                                                |
| 82251287     | Granted     | 7769050       | 4/25/2008   | 40393      | 12/109474          | US | System And Method For Interference Mitigation For Wireless Communication                                                   |



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| 82251782     | Granted | 6832202       | 8/29/1997   | 38335      | 08/921130          | US | Method and System of Routing Requests for Authorized Approval                                 |
| 82251908     | Granted | 6275844       | 2/3/1997    | 37117      | 08/794611          | US | Automatically Maintaining Applications In A Computer System Using A Check-in Time             |
| 82252595     | Granted | 5848425       | 7/1/1996    | 36137      | 08/674392          | US | System and Method for Displaying Alphanumeric Data in a Three Dimensional Grid                |
| 82252598     | Granted | 5805893       | 3/1/1996    | 36046      | 08/609692          | US | Assembly Language Program Converter                                                           |
| 82253468     | Granted | 6871067       | 10/15/2001  | 38433      | 09/977806          | US | Method and System for Communicating Telematics Messages                                       |
| 82255841     | Granted | 7680590       | 12/2/2003   | 40253      | 10/726278          | US | BOUNDARY DETECTION ALGORITHM FOR EMBEDDED DEVICES                                             |
| 82259027     | Granted | 8149578       | 10/31/2009  | 41002      | 12/610314          | US | AIRFLOW RESTRICTOR DOOR                                                                       |
| 82267145     | Granted | 6006330       | 9/16/1994   | 36515      | 08/307472          | US | Security Device For Ring Network                                                              |
| 82267451     | Granted | 6658537       | 11/29/2000  | 12/2/2003  | 09/075307          | US | DMA Driven Processor Cache                                                                    |
| 82267457     | Granted | 6233613       | 8/18/1997   | 5/15/2001  | 08/914294          | US | High Impedance Probe For Monitoring Fast Ethernet LAN Links                                   |
| 82267580     | Granted | 6157635       | 2/13/1998   | 12/5/2000  | 09/023174          | US | INTEGRATED REMOTE DATA ACCESS AND AUDIO/VISUAL CONFERENCE GATEWAY                             |
| 82268831     | Granted | 6246690       | 3/19/1998   | 6/12/2001  | 09/044771          | US | Method And Device For Controlling Data Flow In A Computer Data Network                        |
| 82269011     | Granted | 6360258       | 8/31/1998   | 3/19/2002  | 09/143194          | US | Network Management Software Library Allowing A Sending And retrieval Of Multiple SNMP Objects |
| 82269698     | Granted | 6643271       | 4/30/1999   | 11/4/2003  | 09/303320          | US | ADJUSTABLE GAIN TRANSMIT CANCELLATION IN A FULL DUPLEX MODEM DATA ACCESS ARRANGEMENT (DAA)    |
| 82269827     | Granted | 6697485       | 11/10/1998  | 2/24/2004  | 09/189964          | US | DATA SIGNAL ATTENUATOR AND SYSTEMS AND METHODS FOR USING SAME                                 |
| 82269887     | Granted | 6608812       | 1/15/1999   | 8/19/2003  | 09/232105          | US | Trunk Arrangement In A Computer Network With Intra Trunk Switch Connections                   |
| 82269890     | Granted | 6754173       | 6/2/2003    | 6/22/2004  | 10/452648          | US | Trunk Arrangement In A Computer Network With Intra Trunk Switch Connections                   |
| 82270016     | Granted | 6636505       | 5/28/1999   | 10/21/2003 | 09/322515          | US | SERVICE SELECTION PROCESS BETWEEN HOME LAN DEVICE AND ADSL MODEM INTERFACE                    |
| 82270079     | Granted | 6661880       | 6/12/2001   | 12/9/2003  | 09/879754          | US | SYSTEM AND METHOD FOR EMBEDDING DIGITAL INFORMATION IN A DIAL TONE SIGNAL                     |
| 82270325     | Granted | 6055236       | 3/17/1999   | 4/25/2000  | 09/271025          | US | METHOD AND SYSTEM FOR LOCATING NETWORK SERVICES WITH DISTRIBUTED NETWORK ADDRESS TRANSLATION  |
| 82270454     | Granted | 6674810       | 5/27/1999   | 1/6/2004   | 09/321523          | US | METHOD AND APPARATUS FOR REDUCING PEAK-TO-AVERAGE POWER RATIO IN A DISCRETE MULTI-TONE SIGNAL |

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| 82270514     | Granted | 6717914       | 5/27/1999   | 4/6/2004   | 09/322120          | US | System For Probing Switched Virtual Circuits In A Connected Network                                                                      |
| 82270574     | Granted | 6650712       | 7/27/1999   | 11/18/2003 | 09/361699          | US | LOW COMPLEXITY METHOD AND APPARATUS FOR FSK SIGNAL RECEPTION                                                                             |
| 82270577     | Granted | 6757908       | 5/28/1999   | 6/29/2004  | 09/322833          | US | Graphical Representation Of Impairment Or Other Conditions In A Data-Over-Cable System                                                   |
| 82270697     | Granted | 6691161       | 11/22/1999  | 2/10/2004  | 09/444554          | US | PROGRAM METHOD AND APPARATUS PROVIDING ELEVATION INFORMATION FOR INTERROGATING DEVICES IN A NETWORK                                      |
| 82271009     | Granted | 6732249       | 6/9/2000    | 5/4/2004   | 09/590892          | US | Host Computer Virtual Memory Within A Network Interface Adapter                                                                          |
| 82271012     | Granted | 6842790       | 4/30/2004   | 1/11/2005  | 10/836852          | US | Host Computer Virtual Memory Within A Network Interface Adapter                                                                          |
| 82271639     | Granted | 6914897       | 2/29/2000   | 7/5/2005   | 09/516269          | US | System and Method for Accessing Radio Programs Using a Data Network Telephone in a Network Based Telecommunication System                |
| 82271951     | Granted | 6690721       | 6/21/2000   | 2/10/2004  | 09/598618          | US | METHOD FOR ASYMMETRIC DIGITAL SUBSCRIBER LINE MODEM RECOVERY FROM INSUFFICIENT TRANSMIT POWER                                            |
| 82272071     | Granted | 6281425       | 4/4/2000    | 8/28/2001  | 09/542226          | US | Apparatus and Method of Recharging A Handheld Computing Device Using Solar Power                                                         |
| 82272077     | Granted | 6731950       | 4/24/2000   | 5/4/2004   | 09/556541          | US | Cellular-Based Telephone Connection System                                                                                               |
| 82272320     | Granted | 6757279       | 9/14/2000   | 6/29/2004  | 09/662159          | US | Method For Synchronising Databases in Stacked Network Units                                                                              |
| 82272326     | Granted | 6731633       | 4/25/2000   | 5/4/2004   | 09/556788          | US | Network Unit Including Address Hashing                                                                                                   |
| 82272389     | Granted | 6822957       | 11/7/2000   | 11/23/2004 | 09/707708          | US | Distributed Network Address Translation for a Network Telephony System                                                                   |
| 82272509     | Granted | 6857027       | 11/14/2000  | 2/15/2005  | 09/712610          | US | Intelligent Network Topology and Configuration Verification Using A Method of Loop Detection                                             |
| 82272695     | Granted | 6273735       | 10/25/2000  | 8/14/2001  | 09/696044          | US | Rotating turret side-entry retractable jack                                                                                              |
| 82272701     | Granted | 6847635       | 6/20/2000   | 1/25/2005  | 09/597522          | US | METHOD TO TRANSMIT SILENCE COMPRESSED VOICE OVER IP EFFICIENTLY IN DOCSIS CABLE NETWORKS                                                 |
| 82272758     | Granted | 6856616       | 11/30/2000  | 2/15/2005  | 09/728833          | US | SYSTEM AND METHOD FOR PROVIDING SERVICE PROVIDER CONFIGURATIONS FOR TELEPHONES USING A CENTRAL SERVER IN A DATA NETWORK TELEPHONY SYSTEM |
| 82272950     | Granted | 6675234       | 12/11/2000  | 1/6/2004   | 09/734796          | US | METHOD OF DETECTING TCP/IP BINDINGS OF INSTALLED NETWORK INTERFACE CARDS PRESENT IN A COMPUTER SYSTEM                                    |
| 82273259     | Granted | 6612874       | 6/19/2001   | 9/2/2003   | 09/884543          | US | Rotating Connector Adapter With Strain Relief                                                                                            |
| 82274069     | Granted | 6807266       | 8/30/2002   | 10/19/2004 | 10/232149          | US | Method and Apparatus for Provisioning a Soft Switch                                                                                      |

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| 82275449     | Granted     | 5855494       | 5/5/1997    | 1/5/1999   | 08/851723          | US | Apparatus And Method For Electrically Connecting A Plurality Of Electronic Modules                                              |
| 82651947     | Granted     | 8422649       | 2/23/2011   | 4/16/2013  | 13/032798          | US | Digital Telephone Data And Control Signal Transmission System                                                                   |
| 81974333     | Granted     | 6907380       | 12/1/2003   | 6/14/2005  | 10/726254          | US | COMPUTER IMPLEMENTED SCALABLE, INCREMENTAL AND PARALLEL CLUSTERING BASED ON WEIGHTED DIVIDE AND CONQUER                         |
| 81986384     | Granted     | 7127716       | 2/13/2002   | 10/24/2006 | 10/074799          | US | Method Of Load Balancing A Distributed Workflow Management System                                                               |
| 81988007     | Granted     | 6823323       | 4/26/2001   | 11/23/2004 | 09/844202          | US | Automatic Classification Method And Apparatus                                                                                   |
| 81993563     | Granted     | 7093242       | 11/19/2001  | 8/15/2006  | 09/993229          | US | Dynamic Class Interposition                                                                                                     |
| 82004177     | Granted     | 6823362       | 10/16/2001  | 11/23/2004 | 09/981129          | US | Effectively And Efficiently Updating Content Files Among Duplicate Content Servers                                              |
| 82089086     | Granted     | 7624035       | 2/5/2003    | 11/24/2009 | 10/360451          | US | Extracting An Implied Value Of A Component Associated With A Plurality Of Product Packages                                      |
| 82166186     | Granted     | 7346604       | 10/15/1999  | 3/18/2008  | 09/418418          | US | METHOD FOR RANKING HYPERTEXT SEARCH RESULTS BY ANALYSIS OF HYPERLINKS FROM EXPERT DOCUMENTS AND KEYWORD SCOPE                   |
| 82182797     | Granted     | 8572233       | 7/15/2004   | 10/29/2013 | 10/891989          | US | Method And System For Site Path Evaluation Using Web Session Clustering                                                         |
| 82188101     | Granted     | 7971191       | 6/10/2004   | 6/28/2011  | 10/865464          | US | System And Method For Analyzing A Process                                                                                       |
| 82189100     | Published   |               | 12/17/2004  |            | 11/016119          | US | Methods And Systems That Calculate A Projected Utility Of Information Technology Recovery Plans Based On Contractual Agreements |
| 82189103     | Granted     | 7865582       | 8/11/2004   | 1/4/2011   | 10/915823          | US | System And Method For Assigning An Application Component To A Computing Resource                                                |
| 82190102     | Granted     | 7697438       | 5/12/2004   | 4/13/2010  | 10/844902          | US | Method Of Routing Packet                                                                                                        |
| 82190540     | Granted     | 7135977       | 1/4/2005    | 11/14/2006 | 11/029846          | US | METHOD AND SYSTEM FOR TRACKING IDENTIFICATION DEVICES                                                                           |
| 82191287     | Granted     | 7991779       | 4/25/2005   | 8/2/2011   | 11/114681          | US | Method And Apparatus For Populating An Index Table                                                                              |
| 82194224     | Granted     | 8165972       | 4/22/2005   | 4/24/2012  | 11/113251          | US | Determining A Feature Related To An Indication Of A Concept Using A Classifier                                                  |
| 82200401     | Granted     | 7325006       | 7/30/2004   | 1/29/2008  | 10/903008          | US | System And Method For Category Organization                                                                                     |
| 82202711     | Granted     | 7698111       | 3/9/2005    | 4/13/2010  | 11/076131          | US | METHOD AND APPARATUS FOR COMPUTATIONAL ANALYSIS                                                                                 |
| 82202714     | Granted     | 8543359       | 2/24/2010   | 9/24/2013  | 12/711762          | US | A Method And Apparatus For Computational Analysis                                                                               |
| 82206395     | Granted     | 7836111       | 4/29/2005   | 11/16/2010 | 11/119037          | US | Detecting Change In Data                                                                                                        |
| 82212080     | Granted     | 7702683       | 9/18/2006   | 4/20/2010  | 11/522656          | US | Estimating Similarity Between Two Collections Of Information                                                                    |
| 82214009     | Application |               | 12/29/2006  |            | 11/647715          | US | Visual Content Query For Multi Dimensional Datasets                                                                             |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82215452     | Granted     | 7680641       | 6/9/2006    | 3/16/2010  | 11/450706          | US | IDENTIFYING A MINIMUM CUT AND/OR A MAXIMUM FLOW USING BALANCING OF VERTEX EXCESSES                                                                            |
| 82216133     | Granted     | 7502767       | 7/21/2006   | 3/10/2009  | 11/490781          | US | Computing A Count Of Cases In A Class                                                                                                                         |
| 82217258     | Granted     | 8396737       | 2/21/2006   | 3/12/2013  | 11/358376          | US | Website Analysis Combining Quantitative And Qualitative Data                                                                                                  |
| 82219259     | Application |               | 7/19/2006   |            | 11/488967          | US | Providing A Forecasting Model                                                                                                                                 |
| 82224437     | Granted     | 7756799       | 10/27/2006  | 7/13/2010  | 11/588694          | US | Feature Selection Based On Partial Ordered Set Of Classifiers                                                                                                 |
| 82224440     | Granted     | 7797323       | 10/11/2006  | 9/14/2010  | 11/546235          | US | Producing Representative Hashes For Segments Of A File                                                                                                        |
| 82226684     | Granted     | 7912955       | 4/24/2007   | 3/22/2011  | 11/789409          | US | Model-based Provisioning Of Resources                                                                                                                         |
| 82226687     | Granted     | 8825610       | 7/27/2007   | 9/2/2014   | 11/829792          | US | System Management Based On Goals Relevant To A Current State Of A Managed System                                                                              |
| 82231307     | Granted     | 7577550       | 4/30/2007   | 8/18/2009  | 11/742534          | US | System And Method For Detecting Performance Anomalies In A Computing System                                                                                   |
| 82231367     | Granted     | 7831594       | 4/30/2007   | 11/9/2010  | 11/799141          | US | Estimating The Static Execution Time Of A Database Query                                                                                                      |
| 82234799     | Granted     | 9064119       | 10/1/2008   | 6/23/2015  | 12/242998          | US | Information Scanning Across Multiple Devices                                                                                                                  |
| 82235111     | Granted     | 8022952       | 7/31/2007   | 9/20/2011  | 11/888118          | US | Generating A Visualization To Show Mining Results Prodced From Selected Data Items And Attribute(s) In A Selected Focus Area And Other Portions Of A Data Set |
| 82235237     | Granted     | 8856123       | 7/20/2007   | 10/7/2014  | 11/780803          | US | Document Clasification                                                                                                                                        |
| 82235240     | Granted     | 8046294       | 7/30/2007   | 10/25/2011 | 11/830698          | US | Bidding In Online Auctions                                                                                                                                    |
| 82245977     | Published   |               | 10/15/2008  |            | 12/287921          | US | Virtual Redeemable Offers                                                                                                                                     |
| 82246289     | Published   |               | 1/28/2009   |            | 12/361455          | US | Optimization Of Query Processing With Top Operations                                                                                                          |
| 82246292     | Granted     | 8768938       | 6/25/2009   | 7/1/2014   | 12/491965          | US | Histogram Processing By Trend And Pattern Removal                                                                                                             |
| 82248599     | Granted     | 8224811       | 2/2/2009    | 7/17/2012  | 12/364113          | US | Workload Management Using Robustness Mapping                                                                                                                  |
| 82249286     | Published   |               | 3/24/2009   |            | 12/409550          | US | Populating A Service Registry With Web Content                                                                                                                |
| 82249595     | Granted     | 8375182       | 2/10/2009   | 2/12/2013  | 12/368784          | US | System And Method For Segmenting A Data Stream                                                                                                                |
| 82249664     | Published   |               | 3/24/2009   |            | 12/409561          | US | Transforming A Description Of Services For Web Services                                                                                                       |
| 82250600     | Granted     | 8108400       | 6/27/2009   | 1/31/2012  | 12/493189          | US | Database Segment Searching                                                                                                                                    |
| 82257839     | Published   |               | 8/27/2009   |            | 12/548429          | US | Predicting Email Responses                                                                                                                                    |
| 82258460     | Published   |               | 8/26/2009   |            | 12/461844          | US | Energy Based Wavelet Thresholding                                                                                                                             |
| 82258466     | Granted     | 8400458       | 9/9/2009    | 3/19/2013  | 12/556401          | US | Method And System For Blocking Data On A GPU                                                                                                                  |
| 82258901     | Granted     | 8296342       | 8/31/2009   | 10/23/2012 | 12/551402          | US | Fingerprinting A Database                                                                                                                                     |
| 82259585     | Published   |               | 11/13/2009  |            | 12/618151          | US | Method And System For Processing Web Activity Data                                                                                                            |
| 82259588     | Granted     | 8355997       | 11/13/2009  | 1/15/2013  | 12/618159          | US | Method And System For Developing A Classification Tool                                                                                                        |
| 82259591     | Published   |               | 11/13/2009  |            | 12/618170          | US | Method And System For Segmenting Query Urls                                                                                                                   |
| 82259651     | Published   |               | 3/12/2010   |            | 12/723146          | US | METHOD AND SYSTEM FOR PROVIDING WEBSITE CONTENT                                                                                                               |
| 82260590     | Published   |               | 2/10/2010   |            | 12/703574          | US | Processing A Data Stream                                                                                                                                      |
| 82261022     | Published   |               | 5/30/2010   |            | 12/790844          | US | Predictive Performance Of Collaborative Filtering Model                                                                                                       |

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| 82261025     | Published |               | 1/27/2010   |            | 12/695145          | US | Software Application Testing                                                                  |
| 82261082     | Published |               | 5/11/2010   |            | 12/777425          | US | DETERMINING MULTI-PROGRAMMING LEVEL USING DIMINISHING INTERVAL SEARCH                         |
| 82262270     | Granted   | 8730242       | 5/17/2010   | 5/20/2014  | 12/800526          | US | PERFORMING TIME SLICE-BASED VISUAL PREDICTION                                                 |
| 82263332     | Published |               | 9/24/2010   |            | 12/889805          | US | DETERMINING CORRELATIONS BETWEEN SLOW STREAM AND FAST STREAM INFORMATION                      |
| 82263335     | Granted   | 8661042       | 10/18/2010  | 2/25/2014  | 12/906551          | US | Collaborative Filtering With Hashing                                                          |
| 82604230     | Published |               | 3/23/2011   |            | 13/070056          | US | COMPARING HISTOGRAMS                                                                          |
| 82615989     | Granted   | 8892612       | 3/30/2011   | 11/18/2014 | 13/075570          | US | Exploitation of Correlation Between Original and Desired Data Sequences During Run Generation |
| 82650994     | Published |               | 7/26/2011   |            | 13/190567          | US | SMOOTHING A TIME SERIES DATA SET WHILE PRESERVING PEAK AND/OR TROUGH DATA POINTS              |
| 82660025     | Granted   | 8655800       | 10/7/2008   | 41688      | 13/123095          | US | Analyzing Events                                                                              |
| 82753547     | Allowed   |               | 9/29/2011   |            | 13/248887          | US | Anomaly Detection In Streaming Data                                                           |
| 82892253     | Published |               | 3/13/2012   |            | 13/418576          | US | SELECTING ENTITIES IN A SAMPLING PROCESS                                                      |
| 82900162     | Granted   | 9047495       | 4/30/2012   | 6/2/2015   | 13/460203          | US | IDENTIFYING IMPACT OF A TRAFFIC INCIDENT ON A ROAD NETWORK                                    |
| 82929147     | Published |               | 3/14/2012   |            | 13/420149          | US | Identification and Extraction of New Terms in Documents                                       |
| 82929190     | Granted   | 9081854       | 7/6/2012    | 7/14/2015  | 13/543783          | US | MULTILABEL CLASSIFICATION BY A HIERARCHY                                                      |
| 82961693     | Published |               | 7/31/2012   |            | 13/563575          | US | OPTIMIZED SURGERY SCHEDULING                                                                  |
| 82963382     | Granted   | 8706203       | 4/30/2012   | 4/22/2014  | 13/459952          | US | CLASSIFICATION OF A SIGNAL IN A TIME DOMAIN                                                   |
| 82963508     | Published |               | 4/26/2012   |            | 13/456297          | US | SMOOTHED VISUALIZATION HAVING RINGS CONTAINING PIXELS REPRESENTING UNEVENLY SPACED DATA       |
| 82964753     | Published |               | 9/28/2012   |            | 13/629930          | US | TRANSLATING TIME-STAMPED EVENTS TO PERFORMANCE INDICATORS                                     |
| 83013827     | Published |               | 7/31/2012   |            | 13/563176          | US | DATABASE RETRIEVAL IN ELASTIC STREAMING ANALYTICS PLATFORM                                    |
| 83037485     | Published |               | 10/30/2012  |            | 13/664011          | US | SYSTEMS AND METHODS FOR MODEL SELECTION                                                       |
| 83037551     | Published |               | 8/23/2012   |            | 13/592747          | US | Graphical Visualization Including A Peak Detection Ring                                       |
| 83106310     | Published |               | 11/27/2012  |            | 13/686490          | US | Estimating Unique Entry Counts Using a Counting Bloom Filter                                  |
| 83114199     | Granted   | 8620911       | 4/29/2010   | 12/31/2013 | 13/634764          | US | DOCUMENT REGISTRY SYSTEM                                                                      |
| 83138667     | Published |               | 1/31/2013   |            | 13/755771          | US | SEARCHING THREADS                                                                             |
| 83209716     | Allowed   |               | 4/26/2013   |            | 13/871924          | US | Visual Analytics Using Multivariate Concentric Rings with a Visual Start Time Mechanism       |
| 83221558     | Published |               | 10/8/2010   |            | 13/877395          | US | AUTOMATED NEGOTIATION                                                                         |
| 83668026     | Published |               | 6/28/2011   |            | 14/003140          | US | Capturing Intentions Within Online Text                                                       |
| 83784007     | Published |               | 7/12/2011   |            | 14/131493          | US | AUDIO SAMPLE                                                                                  |
| 84000205     | Published |               | 3/15/2012   |            | 14/384576          | US | TWO-LEVEL CHUNKING FOR DATA ANALYTICS                                                         |

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| 84079684     | Published   |               | 7/30/2012   |            | 14/397717          | US | GENERATING AND PARTITIONING POLYNOMIALS                                                  |
| 84088609     | Published   |               | 4/23/2012   |            | 14/396650          | US | Statistical Analysis using a graphics processing unit                                    |
| 81970025     | Granted     | 7206848       | 9/21/2000   | 4/17/2007  | 09/666910          | US | Intelligently Classifying And Handling User Requests In A Pattern                        |
| 82063553     | Granted     | 8219496       | 2/22/2002   | 7/10/2012  | 10/080479          | US | Service System                                                                           |
| 82065860     | Granted     | 7779267       | 9/4/2001    | 8/17/2010  | 09/946323          | US | Method Of And Apparatus For Ascertaining The Status Of Data Processing Environment       |
| 82069298     | Granted     | 7457951       | 5/25/2000   | 11/25/2008 | 09/979903          | US | Method And Apparatus For Using A Secret In A Distributed Computing System                |
| 82094390     | Granted     | 7398393       | 1/28/2004   | 7/8/2008   | 10/767868          | US | Data Integrity Monitoring In Trusted Computing Entity                                    |
| 82105883     | Granted     | 8051420       | 10/31/2003  | 11/1/2011  | 10/698769          | US | Privacy Management Of Personal Data                                                      |
| 82187291     | Granted     | 7516326       | 10/15/2004  | 4/7/2009   | 10/965197          | US | Method And System For Governing Access To Continuing Utilities                           |
| 82194593     | Granted     | 7986778       | 6/23/2005   | 7/26/2011  | 11/166921          | US | Authentication System And Method                                                         |
| 82198529     | Granted     | 7801302       | 6/10/2005   | 9/21/2010  | 11/150623          | US | Cryptographic Method And Apparatus                                                       |
| 82203713     | Granted     | 8719914       | 10/28/2005  | 5/6/2014   | 11/718126          | US | Cryptographic Method And Apparatus                                                       |
| 82219379     | Granted     | 8050411       | 7/17/2006   | 11/1/2011  | 11/489750          | US | Virtual Computing Infrastructure                                                         |
| 82220753     | Granted     | 8332930       | 7/17/2007   | 12/11/2012 | 12/374734          | US | Method Of Managing One-time Pad Data And Device Implementing This Method                 |
| 82223942     | Granted     | 8943332       | 10/31/2006  | 1/27/2015  | 11/555278          | US | SECURE USE OF USER SECRETS ON A COMPUTING PLATFORM                                       |
| 82242422     | Granted     | 8332730       | 10/14/2008  | 12/11/2012 | 12/740341          | US | Audit-log Integrity Using Redactable Signatures                                          |
| 82242731     | Granted     | 8627313       | 3/9/2009    | 1/7/2014   | 12/400510          | US | Quantum Key Distribution System Using LDPC Codes With A Graph Having A Toroid Structure  |
| 82243040     | Published   |               | 5/20/2009   |            | 12/469571          | US | Virtual Machine Liveness Check                                                           |
| 82243670     | Application |               | 10/1/2008   |            | 12/243129          | US | OKD System Alignment                                                                     |
| 82248284     | Published   |               | 10/30/2008  |            | 12/261355          | US | Managing Collection Of A Payment                                                         |
| 82263707     | Granted     | 8850593       | 5/12/2011   | 9/30/2014  | 13/106719          | US | MANAGEMENT OF VARIANTS OF MODEL OF SERVICE                                               |
| 82277195     | Granted     | 7650494       | 7/2/2003    | 40197      | 10/613522          | US | DATA MANAGEMENT                                                                          |
| 82835608     | Published   |               | 1/20/2012   |            | 13/355114          | US | Method And Apparatus For Use In Relation To Verifying An Association Between Two Parties |
| 82837268     | Granted     | 8868910       | 2/9/2012    | 10/21/2014 | 13/370190          | US | INTERCEPTING DATA                                                                        |
| 82930647     | Published   |               | 4/30/2012   |            | 13/460419          | US | ELLIPTIC CURVE CRYPTOGRAPHIC SIGNATURE                                                   |
| 83159706     | Published   |               | 3/21/2013   |            | 13/848562          | US | Submatch Extraction                                                                      |
| 83193695     | Published   |               | 9/30/2010   |            | 13/822239          | US | ONE PASS SUBMATCH EXTRACTION                                                             |
| 83810416     | Allowed     |               | 8/17/2011   |            | 14/237953          | US | Virtual Machines                                                                         |
| 84185775     | Application |               | 3/6/2015    |            | 14/640562          | US | TRACING DATA BLOCK OPERATIONS                                                            |
| 84196704     | Application |               | 9/28/2012   |            | 14/432202          | US | Composition of Services                                                                  |
|              |             |               |             |            |                    |    | APPLICATION RANDOMIZATION                                                                |

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| 82003994     | Granted     | 7133933       | 8/28/2002   | 11/7/2006  | 10/229677          | US | CONTENT SYNCHRONIZATION FRAMEWORKS USING DYNAMIC ATTRIBUTES AND FILE BUNDLES FOR CONNECTED DEVICES                                                                                                          |
| 82004930     | Granted     | 6915284       | 4/18/2002   | 38538      | 10/125829          | US | System And Method For Automated Message Response Within A System For Harvesting Community Knowledge                                                                                                         |
| 82091147     | Application |               | 10/8/2002   |            | 10/266437          | US | Eliminating Public Knowledge Biases In Small Group Predictions                                                                                                                                              |
| 82120241     | Granted     | 6963869       | 1/7/2002    | 38664      | 10/042028          | US | SYSTEM AND METHOD FOR SEARCH, INDEX, PARSING DOCUMENT DATABASE INCLUDING SUBJECT DOCUMENT HAVING NESTED FIELDS ASSOCIATED START AND END META WORDS WHERE EACH META WORD IDENTIFY LOCATION AND NESTING LEVEL |
| 82197158     | Granted     | 9053501       | 10/31/2004  | 42164      | 10/979014          | US | Spontaneous Sharing Of Media Asset References                                                                                                                                                               |
| 82239983     | Granted     | 8812508       | 12/14/2007  | 41870      | 12/738844          | US | Systems And Methods For Extracting Phases From Text                                                                                                                                                         |
| 82246598     | Granted     | 8250124       | 1/29/2009   | 41142      | 12/362312          | US | ASSIGNING CONTENT TO AN ENTRY IN DIRECTORY                                                                                                                                                                  |
| 82990953     | Published   |               | 7/31/2012   |            | 13/563651          | US | RATING ITEMS BASED ON PERFORMANCE OVER TIME                                                                                                                                                                 |
| 83087160     | Granted     | 9053458       | 8/7/2012    | 42164      | 13/568391          | US | System And Method For Profiling Clients Within A System For Harvesting Community Knowledge                                                                                                                  |
| 83270274     | Published   |               | 9/12/2013   |            | 14/025044          | US | OBTAINING A PRODUCT VIA A REPOSITORY IN AN ORGANIZATION WITH OBTAINMENT UNITS                                                                                                                               |
| 83598165     | Allowed     |               | 8/29/2013   |            | 14/014122          | US | INTEGRATING AND EXTRACTING TOPICS FROM CONTENT OF HETEROGENEOUS SOURCES                                                                                                                                     |
| 83629277     | Published   | 8553611       | 11/21/2013  | 41555      | 14/086186          | US | ATTACHABLE CONTINGENT SERVICE PRICING                                                                                                                                                                       |
| 82184168     | Granted     |               | 38016       |            | 10/769090          | US | Systems And Methods For Multi-access Point Transmission Of Data Using A Plurality Of Access Points                                                                                                          |
| 82193786     | Granted     | 7643458       | 5/25/2005   | 1/5/2010   | 11/137838          | US | Communicating Between Wireless Communities                                                                                                                                                                  |
| 82263584     | Granted     | 8474000       | 8/17/2010   | 6/25/2013  | 12/858352          | US | Managing Upstream Bandwidth                                                                                                                                                                                 |
| 82082906     | Granted     | 8370574       | 6/13/2006   | 2/5/2013   | 11/451810          | US | System And Method For Storing Configuration Data Of A Storage Automation Device                                                                                                                             |
| 82088090     | Granted     | 7334978       | 6/23/2003   | 2/26/2008  | 10/601437          | US | Cartridge-handling Apparatus For A Media Storage System                                                                                                                                                     |
| 82094456     | Granted     | 7031089       | 12/17/2003  | 4/18/2006  | 10/737956          | US | Tape Head Assembly                                                                                                                                                                                          |
| 82095950     | Granted     | 7085101       | 12/24/1998  | 8/1/2006   | 09/220336          | US | Magnetic Cartridge With Rotatably-Mounted Multi-Projection Brake Release Member (as Amended)                                                                                                                |
| 82105316     | Granted     | 7810653       | 10/2/2003   | 10/12/2010 | 10/677709          | US | Apparatus And Method For Mounting A Device To A Rack System                                                                                                                                                 |
| 82130165     | Granted     | 6141312       | 4/4/2000    | 10/31/2000 | 08/939984          | US | OPTICAL TAPE DRIVE THAT PERFORMS DIRECT READ AFTER WRITE OPERATIONS                                                                                                                                         |
| 82176806     | Granted     | 7505261       | 3/18/2004   | 3/17/2009  | 10/804318          | US | Electrical-optical Signal Conversion For Automated Storage Systems                                                                                                                                          |
| 82178177     | Granted     | 7061767       | 2/10/2004   | 6/13/2006  | 10/776704          | US | Data Systems, Apparatuses And/or Methods                                                                                                                                                                    |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|--------------------------------------------------------------------------------------------------------------------------------|
| 82188413     | Granted   | 7359132       | 1/12/2004   | 4/15/2008  | 10/754617          | US | EQUALIZATION PREAMBLE REGION IN DIGITAL DATA STORAGE (DDS) FORMAT                                                              |
| 82189598     | Granted   | 7529060       | 2/2/2004    | 5/5/2009   | 10/770747          | US | Read And Write Head Element Arrangement                                                                                        |
| 82191041     | Granted   | 7167332       | 4/28/2005   | 1/23/2007  | 11/117174          | US | METHOD AND APPARATUS FOR RECORDING DATA ONTO A RECORDING MEDIUM INCLUDING WARNING OF THE APPROACH TO AN END OF MEDIUM POSITION |
| 82197152     | Granted   | 8116028       | 10/14/2005  | 2/14/2012  | 11/250856          | US | Multiple Cartridge Loading Mechanism For DAT160                                                                                |
| 82211393     | Granted   | 7941596       | 10/26/2005  | 5/10/2011  | 11/259223          | US | Locating Media By Characteristics In Storage Apparatus                                                                         |
| 82219817     | Granted   | 7962763       | 7/25/2006   | 6/14/2011  | 11/493912          | US | Data Transfer Device                                                                                                           |
| 82232240     | Published |               | 6/27/2007   |            | 11/769485          | US | Drive Resources In Storage Library Behind Virtual Library                                                                      |
| 82240736     | Granted   | 8488266       | 10/29/2008  | 7/16/2013  | 12/260590          | US | Adjustment Of Tape Reel Height                                                                                                 |
| 82264205     | Granted   | 8432640       | 12/15/2010  | 4/30/2013  | 12/968602          | US | TAPE DRIVE HAVING A FLANGELESS ROLLER                                                                                          |
| 82829608     | Granted   | 8570678       | 11/18/2011  | 10/29/2013 | 13/299602          | US | Determining Tape Head Condition                                                                                                |
| 82832359     | Granted   | 8553353       | 12/9/2011   | 10/8/2013  | 13/315982          | US | NEUTRALIZATION OF STATIC CHARGE ON MAGNETIC TAPE                                                                               |
| 82838144     | Granted   | 8611039       | 4/29/2009   | 12/17/2013 | 13/260174          | US | Arrangement And Processing Of Longitudinal Position Information On A Data Storage Medium                                       |
| 82901676     | Granted   | 9135124       | 4/30/2012   | 9/15/2015  | 13/459911          | US | Sequence Indicator For Command Communicated To A Sequential Access Storage Device                                              |
| 82961968     | Granted   | 8566850       | 4/11/2012   | 10/22/2013 | 13/444480          | US | MULTIMEDIA DRIVE                                                                                                               |
| 83951217     | Granted   | 8655977       | 11/26/2012  | 2/18/2014  | 13/685539          | US | System And Method For Inquiry Caching                                                                                          |
| 83952528     | Granted   | 8982509       | 4/27/2012   | 3/17/2015  | 14/373275          | US | ELECTRICALLY ISOLATED TAPE GUIDE                                                                                               |
| 82237922     | Granted   | 7111197       | 9/20/2002   | 9/19/2006  | 10/251626          | US | SYSTEM AND METHOD FOR JOURNAL RECOVERY FOR MULTINODE ENVIRONMENTS                                                              |
| 82237925     | Granted   | 7467330       | 8/4/2006    | 12/16/2008 | 11/499907          | US | System And Method For Journal Recovery For Multinode Environments                                                              |
| 82237988     | Granted   | 7240057       | 9/20/2002   | 7/3/2007   | 10/251894          | US | System And Method For Implementing Journaling In A Multi-node Environment                                                      |
| 82245542     | Granted   | 8874627       | 10/30/2008  | 10/28/2014 | 12/261071          | US | Enumerating Metadata In File System Directories                                                                                |
| 82261583     | Granted   | 7406484       | 4/29/2003   | 7/29/2008  | 10/425550          | US | Storage Allocation In A Distributed Segmented File System                                                                      |
| 83205302     | Published |               | 4/19/2013   |            | 13/866732          | US | AUTOMATIC WORM-RETENTION STATE TRANSITIONS                                                                                     |
| 81976460     | Granted   | 6778659       | 2/23/2001   | 8/17/2004  | 09/792857          | US | Customer Service Routing System And Method                                                                                     |
| 81980141     | Granted   | 7058624       | 6/20/2001   | 6/6/2006   | 09/885902          | US | System And Method For Optimizing Search Results                                                                                |
| 81998876     | Granted   | 6952689       | 2/21/2003   | 10/4/2005  | 10/372475          | US | Automating Expert Knowledge With Analyzer Harness                                                                              |
| 82055810     | Granted   | 6390695       | 8/8/2000    | 5/21/2002  | 09/634263          | US | Imaging Device Testing With Thermographic Sheet Material                                                                       |
| 82092518     | Granted   | 7168003       | 8/7/2002    | 1/23/2007  | 10/213986          | US | Method And Apparatus For Automating Printer And Printer Driver Diagnostics And Repair                                          |
| 82092521     | Granted   | 8488143       | 2/28/2003   | 7/16/2013  | 10/377438          | US | Method And Apparatus For Detecting Printer Internet Protocol Addresses                                                         |
| 82106003     | Granted   | 7016808       | 11/3/2003   | 3/21/2006  | 10/700099          | US | Analyzing And Servicing Imaging Devices                                                                                        |

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| 82172744     | Granted   | 8725844       | 11/5/2003   | 5/13/2014  | 10/7/01869         | US | Method And System For Adjusting The Relative Value Of System Configuration Recommendations                |
| 82191284     | Granted   | 7765538       | 10/29/2004  | 7/27/2010  | 10/977694          | US | METHOD AND APPARATUS FOR DETERMINING WHICH PROGRAM PATCHES TO RECOMMEND FOR INSTALLATION                  |
| 82203146     | Granted   | 7634671       | 7/26/2006   | 12/15/2009 | 11/492963          | US | DETERMINING POWER CONSUMPTION IN IT NETWORKS                                                              |
| 82216631     | Published |               | 5/9/2007    |            | 11/746066          | US | Method And Apparatus For Assigning Rack Space                                                             |
| 82247228     | Granted   | 7633181       | 6/1/2006    | 40162      | 11/421516          | US | DC-BASED DATA CENTER POWER ARCHITECTURE                                                                   |
| 82249907     | Published |               | 10/30/2008  |            | 12/261250          | US | DATA CENTER AND DATA CENTER DESIGN                                                                        |
| 82159634     | Granted   | 5918029       | 9/8/1997    | 6/29/1999  | 08/999899          | US | BUS INTERFACE SLICING MECHANISM ALLOWING FOR A CONTROL/DATA-PATH SLICE                                    |
| 82164941     | Granted   | 5793998       | 4/17/1996   | 8/11/1998  | 08/633988          | US | METHOD AND APPARATUS FOR INTERCONNECTION OF MULTIPLE MODULES                                              |
| 82165751     | Granted   | 5860002       | 7/12/1996   | 1/12/1999  | 08/678891          | US | System For Assigning Boot Strap Processor In Symmetric Multiprocessor Computer With Watchdog Reassignment |
| 82169120     | Granted   | 8683139       | 10/31/2006  | 3/25/2014  | 11/554827          | US | Cache And Method For Cache Bypass Functionality                                                           |
| 82172306     | Granted   | 7415700       | 10/14/2003  | 39679      | 10/684842          | US | Runtime Quality Verification Of Execution Units                                                           |
| 82175177     | Granted   | 7539832       | 8/23/2004   | 5/26/2009  | 10/923905          | US | Option Rom Code Acquisition                                                                               |
| 82178672     | Granted   | 6982586       | 3/22/2004   | 38720      | 10/805863          | US | Systems And Methods For Clock Generation Using Hot-Swappable Oscillators                                  |
| 82178867     | Granted   | 7307220       | 1/12/2005   | 39427      | 11/034072          | US | Circuit Board For Cable Termination                                                                       |
| 82180301     | Granted   | 7380174       | 9/28/2004   | 39595      | 10/952463          | US | VARIABLE WRITING THROUGH A FIXED PROGRAMMING INTERFACE                                                    |
| 82180421     | Granted   | 7962696       | 1/15/2004   | 40708      | 10/758368          | US | System And Method For Updating Owner Predictors                                                           |
| 82180610     | Granted   | 7277292       | 4/28/2004   | 10/2/2007  | 10/834517          | US | EXPANDABLE BRACING APPARATUS AND METHOD                                                                   |
| 82180733     | Granted   | 7092253       | 4/1/2004    | 8/15/2006  | 10/816696          | US | Back Plane And Mid-plane Assemblies And Related Systems And Methods                                       |
| 82180982     | Granted   | 8924653       | 10/31/2006  | 12/30/2014 | 11/554672          | US | Transactional Cache Memory System                                                                         |
| 82181174     | Granted   | 7027309       | 2/20/2004   | 4/11/2006  | 10/783146          | US | Engaging/Disengaging Mechanism                                                                            |
| 82181735     | Granted   | 7568063       | 2/2/2006    | 7/28/2009  | 11/346041          | US | SYSTEM AND METHOD FOR A DISTRIBUTED CROSSBAR NETWORK USING A PLURALITY OF CROSSBARS                       |
| 82182044     | Granted   | 8301844       | 1/13/2004   | 10/30/2012 | 10/756534          | US | Consistency Evaluation Of Program Execution Across At Least One Memory Barrier                            |
| 82182668     | Granted   | 7344384       | 10/25/2004  | 3/18/2008  | 10/972688          | US | Bolster Plate Assembly For Processor Module Assembly                                                      |
| 82186352     | Granted   | 7953900       | 10/19/2004  | 5/31/2011  | 10/969756          | US | SYSTEM AND METHOD FOR DISCOVERING I/O BUS CAPABILITIES ON A COMPUTER SYSTEM VIA ACPI                      |
| 82190660     | Granted   | 7392172       | 4/28/2005   | 6/24/2008  | 11/116564          | US | Providing Virtual Device Access Via Firmware                                                              |
| 82192040     | Granted   | 7652889       | 10/25/2005  | 1/26/2010  | 11/258665          | US | INFORMATION TECHNOLOGY (IT) EQUIPMENT POSITION LOCATING SYSTEM USING JUMPER CONNECTIONS                   |
| 82197281     | Granted   | 7385824       | 7/29/2005   | 6/10/2008  | 11/192736          | US | PROCESSOR MODULE WITH RIGIDLY COUPLED PROCESSOR AND VOLTAGE-REGULATOR HEAT SINKS                          |

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| 82197284     | Granted     | 7383691       | 1/26/2005   | 6/10/2008  | 11/043317          | US | Modular Networked Sensor Assembly                                                                                         |
| 82197533     | Granted     | 8677034       | 4/28/2006   | 3/18/2014  | 11/413824          | US | System For Controlling I/O Devices In A Multi-partition Computer System                                                   |
| 82202276     | Granted     | 7544072       | 10/29/2007  | 6/9/2009   | 11/926274          | US | Retractable Protection Apparatus For Electronic Devices                                                                   |
| 82209770     | Granted     | D540806       | 8/3/2005    | 39189      | 29/235641          | US | Computer Having A Front Bezel                                                                                             |
| 82210265     | Granted     | D560466       | 3/24/2006   | 1/29/2008  | 29/256798          | US | Computer Release Latch                                                                                                    |
| 82212386     | Granted     | 7417864       | 5/16/2006   | 8/26/2008  | 11/435903          | US | Gear Driven Socket Activation Mechanism                                                                                   |
| 82213889     | Granted     | 7298619       | 5/2/2006    | 11/20/2007 | 11/416561          | US | Cable Management Arm With Integrated Heat Exchange                                                                        |
| 82213952     | Granted     | 7600079       | 10/27/2006  | 10/6/2009  | 11/553813          | US | Performing A Memory Write Of A Data Unit Without Changing Ownership Of The Data Unit                                      |
| 82216637     | Granted     | 7809025       | 9/29/2006   | 10/5/2010  | 11/540244          | US | System And Method For Distributing Clock Signals                                                                          |
| 82217819     | Granted     | 7540746       | 4/6/2006    | 6/2/2009   | 11/399069          | US | Electrical Encoding Of Cable Types And Configurations                                                                     |
| 82219946     | Granted     | D577723       | 6/30/2006   | 9/30/2008  | 29/262396          | US | Single Handed U-shaped Handle For Computer Controller                                                                     |
| 82224623     | Granted     | 7656657       | 1/22/2007   | 2/2/2010   | 11/656070          | US | System And Method For Tool-less Mounting Of A Device With A Chassis                                                       |
| 82224626     | Granted     | 8880582       | 3/30/2007   | 11/4/2014  | 11/731277          | US | USER ACCESS TO A PARTIONABLE SERVER                                                                                       |
| 82226438     | Granted     | 7814301       | 4/11/2007   | 10/12/2010 | 11/786125          | US | CLOCK ARCHITECTURE FOR MULTI-PROCESSOR SYSTEMS                                                                            |
| 82227182     | Granted     | 7684209       | 7/23/2007   | 3/23/2010  | 11/880528          | US | Printed Circuit Board Engagement Assembly                                                                                 |
| 82228868     | Granted     | 7697305       | 4/27/2007   | 4/13/2010  | 11/741256          | US | APPARATUS AND METHOD FOR ENHANCING CONDUCTIVITY                                                                           |
| 82231427     | Published   |               | 4/27/2007   |            | 11/741673          | US | GRANULATED HARDWARE RESOURCE PROTECTION IN AN ELECTRONIC SYSTEM                                                           |
| 82234493     | Granted     | 7823004       | 8/1/2007    | 10/26/2010 | 11/832237          | US | Clock Source Selection For Modular Computer System As A Function Of Modulo Difference                                     |
| 82249100     | Published   |               | 1/23/2009   |            | 12/358436          | US | MANAGING WORKLOAD DISTRIBUTION AMONG COMPUTER SYSTEMS BASED ON INTERSECTION OF THROUGHPUT AND LATENCY MODELS (as amended) |
| 82259966     | Granted     | 8335879       | 4/29/2010   | 12/18/2012 | 12/770132          | US | Node Differentiation In Multi-Node Electronic Systems                                                                     |
| 82262897     | Granted     | 8363373       | 7/28/2010   | 1/29/2013  | 12/844852          | US | ENCLOSURE WITH AN E-FUSE CONNECTED TO MULTIPLE BLADE COMPUTERS                                                            |
| 82264211     | Granted     | 8522077       | 10/27/2010  | 8/27/2013  | 12/913560          | US | POWER SUPPLY GRID SWITCH                                                                                                  |
| 82576948     | Granted     | D656940       | 1/31/2011   | 4/3/2012   | 29/384497          | US | CRADLE FOR PORTABLE SERVER MONITOR                                                                                        |
| 82675551     | Granted     | 8564946       | 1/8/2009    | 10/22/2013 | 13/139342          | US | Computer Including Hot-pluggable Disk Storage Drives That Are Mounted In An In-line Arrangement                           |
| 82855499     | Granted     | 8784540       | 6/11/2009   | 7/22/2014  | 13/263807          | US | Systems And Methods Of Dust Mitigation                                                                                    |
| 82901553     | Granted     | 8797732       | 3/5/2012    | 8/5/2014   | 13/411760          | US | SERVER BACKPLANE                                                                                                          |
| 82947564     | Granted     | 8656236       | 6/20/2012   | 2/18/2014  | 13/527940          | US | Remote Boundary Scanning                                                                                                  |
| 83049207     | Granted     | D699718       | 9/20/2012   | 2/18/2014  | 29/432783          | US | COVER FOR A COMPUTING DEVICE WITH A FRONT FAN                                                                             |
| 83747814     | Application |               | 1/13/2014   |            | 14/153303          | US | DEMARCATION DEVICE                                                                                                        |

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| 83862753     | Published    |               | 10/7/2011   |            | 14/349070 US       | US | MAPPING PERSISTENT STORAGE                                                                                                                              |
| 84044330     | Application  |               | 10/30/2014  |            | 29/507766 US       | US | SLED FOR A CARRIER                                                                                                                                      |
| 84068881     | Published    |               | 4/26/2012   |            | 14/396728 US       | US | SERVER ADAPTER                                                                                                                                          |
| 84080537     | Published    |               | 7/31/2012   |            | 14/397069 US       | US | RECEIVING INPUT POWER MEASUREMENTS TO MANAGE A RECTIFIER                                                                                                |
| 84104759     | Application  |               | 8/17/2012   |            | 14/399949 US       | US | CONNECTION INCLUDING FLANGE IN COOPERATION WITH RESILIENT MEMBER TO ENGAGE AND DISENGAGE REMOVABLE PRINTED CIRCUIT ASSEMBLY                             |
| 84192582     | Application  |               | 9/28/2012   |            | 14/432207 US       | US | COOLING ASSEMBLY                                                                                                                                        |
| 84192682     | Application  |               | 10/31/2012  |            | 14/690200 US       | US | MODULAR RACK SYSTEM                                                                                                                                     |
| 84210830     | Application  |               | 9/28/2012   |            | 14/432193 US       | US | TEMPERATURE REGULATION OF A CPU                                                                                                                         |
| 84242426     | Application  |               | 11/19/2012  |            | 14/440851 US       | US | ELECTRICAL CONNECTORS FOR POWER SUPPLIES                                                                                                                |
| 90001571     | Application  |               | 7/23/2015   |            | 29/533983 US       | US | Multi-Sectional Door for a FlexRack                                                                                                                     |
| 90035268     | Acknowledged |               |             |            |                    | US | Apollo 4200 HDD Tray Release Latch Design                                                                                                               |
| 81971150     | Granted      | 6813275       | 4/21/2000   | 11/2/2004  | 09/556052 US       | US | Method And Apparatus For Preventing Underflow And Overflow Across An Asynchronous Channel                                                               |
| 81971399     | Granted      | 6697929       | 2/14/2000   | 2/24/2004  | 09/504004 US       | US | Scannable Zero-catcher And One-catcher Circuits For Reduced Clock Loading And Power Dissipation                                                         |
| 82000679     | Granted      | 6789167       | 3/6/2002    | 38237      | 10/092668 US       | US | Method And Apparatus For Multi-Core Processor Integrated Circuit Having Functional Elements Configurable As Core Elements And As System Device Elements |
| 82000742     | Granted      | 6665227       | 10/24/2001  | 12/16/2003 | 10/045529 US       | US | METHOD AND APPARATUS FOR REDUCING AVERAGE POWER IN RAMS BY DYNAMICALLY CHANGING THE BIAS ON PFET'S CONTAINED IN MEMORY CELLS                            |
| 82003742     | Granted      | 7523455       | 5/3/2002    | 4/21/2009  | 10/139074 US       | US | METHOD AND SYSTEM FOR APPLICATION MANAGED CONTEXT SWITCHING                                                                                             |
| 82013480     | Granted      | 5892698       | 4/4/1996    | 4/6/1999   | 08/628178 US       | US | 2's Complement Floating-Point Multiply Accumulate Unit                                                                                                  |
| 82014104     | Granted      | 5764085       | 7/31/1997   | 6/9/1998   | 08/904244 US       | US | Method And Apparatus For Sharing A FET Between A Plurality Of Operationally Exclusive Logic Gates                                                       |
| 82014602     | Granted      | 5761490       | 5/28/1996   | 6/2/1998   | 08/654440 US       | US | Changing The Meaning Of A Pre-Decode Bit In A Cache Memory Depending On Branch Prediction Mode                                                          |
| 82014608     | Granted      | 5765220       | 6/18/1996   | 6/9/1998   | 08/664604 US       | US | APPARATUS AND METHOD TO REDUCE INSTRUCTION ADDRESS STORAGE IN A SUPER- SCALER PROCESSOR                                                                 |
| 82015106     | Granted      | 5761474       | 5/24/1996   | 6/2/1998   | 08/655330 US       | US | Operand Dependency Tracking System And Method For A Processor That Executes Instructions Out Of Order                                                   |
| 82015853     | Granted      | 5663902       | 7/18/1996   | 9/2/1997   | 08/683485 US       | US | System And Method For Disabling Static Current Paths In Fuse Logic                                                                                      |
| 82020533     | Granted      | 5794012       | 10/9/1996   | 8/11/1998  | 08/728338 US       | US | VERIFICATION OF STRONGLY ORDERED MEMORY ACCESSES IN A FUNCTIONAL MODEL OF AN OUT-OF ORDER COMPUTER SYSTEM                                               |

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| 82020539     | Granted | 5815688       | 10/9/1996   | 36067      | 08/728088          | US | VERIFICATION OF ACCESSES IN A FUNCTIONAL MODEL OF A SPECULATIVE OUT-OF-ORDER COMPUTER SYSTEM                                                         |
| 82024595     | Granted | 6157266       | 2/12/1998   | 12/5/2000  | 09/022464          | US | Delay Elements Arranged For A Signal Controlled Oscillator                                                                                           |
| 82028462     | Granted | 6246721       | 9/22/1997   | 6/12/2001  | 08/935012          | US | Termination Structure Based On The Cancellation Of The Reflected Wave                                                                                |
| 82031339     | Granted | 6775752       | 2/21/2000   | 38209      | 09/510288          | US | System And Method For Efficiently Updating A Fully Associative Array                                                                                 |
| 82031399     | Granted | 6820190       | 2/2/2000    | 38307      | 09/496844          | US | METHOD AND COMPUTER SYSTEM FOR DECOMPOSING MACROINSTRUCTIONS INTO MICROINSTRUCTIONS AND FORCING THE PARALLEL ISSUE OF AT LEAST TWO MICROINSTRUCTIONS |
| 82036706     | Granted | 6170021       | 10/19/1998  | 1/2/2001   | 09/175802          | US | SERVER COMPUTER I/O REDIRECTION TOOL FOR REMOTE CONSOLING                                                                                            |
| 82043762     | Granted | 6061222       | 8/28/1998   | 5/9/2000   | 09/141549          | US | METHOD AND APPARATUS FOR REDUCING NOISE IN INTEGRATED CIRCUIT CHIPS                                                                                  |
| 82049195     | Granted | 6323714       | 2/3/2000    | 11/27/2001 | 09/497094          | US | System And Method For Deskewing Synchronous Clocks In A Very Large Scale Integrated Circuit                                                          |
| 82088084     | Granted | 9146738       | 10/20/2008  | 9/29/2015  | 12/254687          | US | Interleaving Bits Of Multiple Instruction Results In A Single Destination Register                                                                   |
| 82097579     | Granted | 7818646       | 11/12/2003  | 10/19/2010 | 10/712902          | US | Expectation Based Event Verification                                                                                                                 |
| 82105382     | Granted | 6786760       | 4/21/2003   | 38237      | 10/420577          | US | Method And System For Sensing IC Package Orientation In Sockets                                                                                      |
| 82117679     | Granted | 6662319       | 8/31/2000   | 12/9/2003  | 09/652314          | US | SPECIAL ENCODING OF KNOWN BAD DATA                                                                                                                   |
| 82117682     | Granted | 7100096       | 9/30/2003   | 38958      | 10/675133          | US | SPECIAL ENCODING OF KNOWN BAD DATA                                                                                                                   |
| 82129103     | Granted | 6285406       | 3/28/1997   | 37138      | 08/829437          | US | POWER MANAGEMENT SCHEMES FOR APPARATUS WITH CONVERGED FUNCTIONALITIES                                                                                |
| 82130912     | Granted | 5834856       | 8/15/1997   | 36109      | 08/912877          | US | COMPUTER SYSTEM COMPRISING A METHOD AND APPARATUS FOR PERIODIC TESTING OF REDUNDANT DEVICES                                                          |
| 82131350     | Granted | 6370657       | 11/19/1998  | 37355      | 09/196264          | US | HOT PROCESSOR SWAP IN A MULTIPROCESSOR PERSONAL COMPUTER SYSTEM                                                                                      |
| 82131605     | Granted | 6216216       | 10/7/1998   | 36991      | 09/167768          | US | METHOD AND APPARATUS FOR PROVIDING PROCESSOR PARTITIONING ON A MULTIPROCESSOR MACHINE                                                                |
| 82131662     | Granted | 6742066       | 3/27/2002   | 38132      | 10/108106          | US | METHOD FOR CONTROLLING REMOTE CONSOLE FUNCTIONALITY ASSIST LOGIC                                                                                     |
| 82131665     | Granted | 7447818       | 11/18/2003  | 39756      | 10/716144          | US | SYSTEM AND METHOD FOR CONTROLLING REMOTE CONSOLE FUNCTIONALITY ASSIST LOGIC                                                                          |
| 82131731     | Granted | 6182236       | 8/26/1998   | 1/30/2001  | 09/140146          | US | CIRCUIT AND METHOD EMPLOYING FEEDBACK FOR DRIVING A CLOCKING SIGNAL TO COMPENSATE FOR LOAD-INDUCED SKEW                                              |

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| 82133726     | Granted     | 6757725       | 4/6/2000    | 6/29/2004  | 09/544574          | US | SHARING AN ETHERNET NIC BETWEEN TWO SUB-SYSTEMS                                                                                                                                 |
| 82137032     | Granted     | 6107839       | 2/1/1999    | 8/22/2000  | 09/241003          | US | HIGH INPUT IMPEDANCE, STROBED CMOS DIFFERENTIAL SENSE AMPLIFIER WITH DOUBLE FIRE EVALUATE                                                                                       |
| 82171247     | Granted     | 7237144       | 4/6/2004    | 6/26/2007  | 10/818994          | US | Off-chip Lockstep Checking                                                                                                                                                      |
| 82181612     | Granted     | 7228472       | 1/11/2005   | 6/5/2007   | 11/032928          | US | System And Method To Control Data Capture                                                                                                                                       |
| 82184231     | Granted     | 7624319       | 12/23/2004  | 11/24/2009 | 11/022079          | US | Performance Monitoring System                                                                                                                                                   |
| 82193288     | Granted     | 7660937       | 6/28/2006   | 2/9/2010   | 11/477060          | US | Emulating A Usb Host Controller                                                                                                                                                 |
| 82196282     | Granted     | 8392901       | 10/28/2005  | 3/5/2013   | 11/262200          | US | Replacing A ROM Image In A Computer's ROM                                                                                                                                       |
| 82220756     | Granted     | 8031819       | 10/27/2006  | 40820      | 11/588459          | US | Systems And Methods For Synchronizing An Input Signal                                                                                                                           |
| 82233425     | Granted     | 7671634       | 7/30/2007   | 3/2/2010   | 11/830126          | US | Redundant Clock Switch Circuit                                                                                                                                                  |
| 82233740     | Granted     | 7967626       | 12/4/2009   | 6/28/2011  | 12/631056          | US | TAMPER-EVIDENT CONNECTOR                                                                                                                                                        |
| 82235552     | Granted     | 8738658       | 4/23/2008   | 5/27/2014  | 12/108466          | US | Method For Using Paths In A Directory For Locating Objects                                                                                                                      |
| 82237862     | Published   |               | 2/15/2008   |            | 12/867185          | US | Changing Power States Of Data-handling Devices To Meet Redundancy Criterion                                                                                                     |
| 82239107     | Granted     | 8417967       | 4/2/2008    | 4/9/2013   | 12/935715          | US | STORAGE DEVICE DATA ENCRYPTION USING A BINARY LARGE OBJECT (BLOB)                                                                                                               |
| 82559530     | Granted     | 8782289       | 6/10/2008   | 7/15/2014  | 12/996996          | US | Presenting Multi-Function Devices Behind A Switch Hierarchy As A Single Function Device                                                                                         |
| 82664940     | Granted     | 8661279       | 7/19/2011   | 2/25/2014  | 13/185799          | US | POWER CAPPING USING C-STATES                                                                                                                                                    |
| 82672099     | Granted     | 8792486       | 8/31/2011   | 41849      | 13/223253          | US | Packet routing within server device enclosure                                                                                                                                   |
| 82892356     | Granted     | 9058155       | 6/19/2009   | 42171      | 13/375138          | US | ENCLOSURE POWER CONTROLLER PROVIDING PLURALITY OF POWER CONTROL SIGNALS TO PLURALITY OF REMOVABLE COMPUTE NODES BASED ON A DUTY CYCLE OF EACH POWER CONTROL SIGNAL (AS AMENDED) |
|              |             |               |             |            |                    |    | MANAGING A SET OF RESOURCES                                                                                                                                                     |
| 82911812     | Published   |               | 4/3/2012    |            | 13/438357          | US | Switch Module                                                                                                                                                                   |
| 82961736     | Granted     | 9036629       | 4/27/2012   | 42143      | 13/458053          | US | WEAR-LEVELING CORES OF A MULTI-CORE PROCESSOR                                                                                                                                   |
| 83977191     | Published   |               | 2/24/2012   |            | 14/366927          | US | SELF-BIASED DELAY LOCKED LOOP WITH DELAY LINEARIZATION                                                                                                                          |
| 84059581     | Published   |               | 4/26/2012   |            | 14/387618          | US | Enclosure Power Controller                                                                                                                                                      |
| 84220840     | Published   |               | 5/8/2015    |            | 14/707621          | US | Power Capping Feedback Normalization                                                                                                                                            |
| 84289247     | Application |               | 7/29/2015   |            | 14/812460          | US | DATA CORRUPTION AVOIDANCE ON A BACKPLANE BUS ADAPTED TO RECEIVE BUS CONTROLLER CARDS OF DIFFERENT TYPES                                                                         |
| 81973646     | Granted     | 6668294       | 3/17/2001   | 12/23/2003 | 09/810964          | US | Data Corruption Avoidance On A Backplane Bus Adapted To Receive Bus Controller Cards Of Different Types                                                                         |
| 81973649     | Granted     | 7043586       | 11/19/2003  | 5/9/2006   | 10/716856          | US | System And Method For Providing Secure Access To Network Logical Storage Partitions                                                                                             |
| 81990572     | Granted     | 7500069       | 9/17/2001   | 3/3/2009   | 09/954352          | US |                                                                                                                                                                                 |

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| 81990629     | Granted | 7340572       | 3/6/2002    | 39511      | 10/094827          | US | Method And System For Reliable Remote-mirror Resynchronization In Disk Arrays And Other Mass Storage Devices              |
| 81993629     | Granted | 7330013       | 11/12/2003  | 2/12/2008  | 10/712451          | US | APPARATUS AND METHOD FOR CHARGING AND DISCHARGING A BATTERY                                                               |
| 82031585     | Granted | 6532121       | 10/25/1999  | 3/11/2003  | 09/426831          | US | Compression Algorithm With Embedded Meta-Data For Partial Record Operation Augmented With Expansion Jobs                  |
| 82031588     | Granted | 7062702       | 3/14/2001   | 6/13/2006  | 09/808710          | US | Efficient Parity Operations                                                                                               |
| 82062491     | Granted | 6934881       | 4/27/2001   | 8/23/2005  | 09/843148          | US | MEMORY INCLUDING PORTION STORING A COPY OF PRIMARY OPERATING SYSTEM AND METHOD OF OPERATING COMPUTER INCLUDING THE MEMORY |
| 82069355     | Granted | 6931509       | 12/15/2003  | 8/16/2005  | 10/734624          | US | Address Mapping In Solid State Storage Device                                                                             |
| 82086653     | Granted | 6977927       | 9/18/2000   | 12/20/2005 | 09/664500          | US | Method And System Of Allocating Storage Resources In A Storage Area Network                                               |
| 82086713     | Granted | 6804819       | 9/18/2000   | 10/12/2004 | 09/665583          | US | Method, System, And Computer Program Product For A Data Propagation Platform And Applications Of Same                     |
| 82089524     | Granted | 7293048       | 10/29/2003  | 11/6/2007  | 10/697820          | US | SYSTEM FOR PRESERVING LOGICAL OBJECT INTEGRITY WITHIN A REMOTE MIRROR CACHE                                               |
| 82091456     | Granted | 7117309       | 4/14/2003   | 10/3/2006  | 10/414195          | US | Method Of Detecting Sequential Workloads To Increase Host Read Throughput                                                 |
| 82099325     | Granted | 7366866       | 10/30/2003  | 4/29/2008  | 10/699318          | US | Block Size Allocation In Copy Operations                                                                                  |
| 82102196     | Allowed |               | 4/30/2004   |            | 10/835991          | US | System And Method For Message Routing In A Network                                                                        |
| 82105070     | Granted | 8023520       | 3/27/2003   | 9/20/2011  | 10/401236          | US | Signaling Packet                                                                                                          |
| 82117241     | Granted | 6643795       | 3/30/2000   | 11/4/2003  | 09/538680          | US | CONTROLLER-BASED BI-DIRECTIONAL REMOTE COPY SYSTEM WITH STORAGE SITE FAILOVER CAPABILITY                                  |
| 82117244     | Granted | 6658540       | 3/31/2000   | 12/2/2003  | 09/540309          | US | METHOD FOR TRANSACTION COMMAND ORDERING IN A REMOTE DATA REPLICATION SYSTEM                                               |
| 82117427     | Granted | 6961347       | 6/20/2000   | 11/1/2005  | 09/597190          | US | HIGH-SPEED INTERCONNECTION LINK HAVING AUTOMATED LANE REORDERING                                                          |
| 82119680     | Granted | 6978345       | 5/15/2001   | 12/20/2005 | 09/855483          | US | SELF-MIRRORING HIGH PERFORMANCE DISK DRIVE                                                                                |
| 82119863     | Granted | 7720928       | 6/1/2001    | 5/18/2010  | 09/872962          | US | Centralized Fine-grained Enhancements For Distributed Table Driven I/O Mapping                                            |
| 82119926     | Granted | 6928513       | 3/26/2002   | 8/9/2005   | 10/106814          | US | System And Method For Managing Data Logging Memory In A Storage Area Network                                              |
| 82119929     | Granted | 7542986       | 3/26/2002   | 6/2/2009   | 10/106905          | US | System And Method For Maintaining Order For A Replicated Multi-unit I/O Stream                                            |
| 82120118     | Granted | 7051122       | 7/9/2004    | 5/23/2006  | 10/888156          | US | Structure And Process For Distributing SCSI LUN Semantics Across Parallel Distributed Components                          |
| 82120550     | Granted | 7124247       | 11/2/2004   | 10/17/2006 | 10/979298          | US | Quantification Of A Virtual Disk Allocation Pattern In A Virtualized Storage Pool                                         |

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| 82124738     | Granted   | 5809285       | 12/21/1995  | 9/15/1998  | 08/576555          | US | COMPUTER SYSTEM HAVING A VIRTUAL DRIVE ARRAY CONTROLLER                                                                                                                    |
| 82134845     | Granted   | 6188973       | 3/29/1999   | 2/13/2001  | 09/280399          | US | AUTOMATIC MAPPING, MONITORING, AND CONTROL OF COMPUTER ROOM COMPONENTS                                                                                                     |
| 82134848     | Granted   | 5790782       | 11/15/1996  | 8/4/1998   | 08/746739          | US | AUTOMATIC DISK DRIVE SHELF ADDRESS ASSIGNMENT AND ERROR DETECTION METHOD AND APPARATUS                                                                                     |
| 82163819     | Granted   | 5826001       | 10/13/1995  | 10/20/1998 | 08/542670          | US | RECONSTRUCTING DATA BLOCKS IN A RAID ARRAY DATA STORAGE SYSTEM HAVING STORAGE DEVICE METADATA AND RAID SET METADATA                                                        |
| 82165193     | Granted   | 5933592       | 10/13/1995  | 8/3/1999   | 08/542933          | US | PROMOTING DEVICE LEVEL ERROR TO RAIDSET LEVEL ERROR TO RESTORE REDUNDACY IN A RAID ARRAY DATA STORAGE SYSTEM                                                               |
| 82165943     | Granted   | 6463532       | 2/23/1999   | 10/8/2002  | 09/255897          | US | SYSTEM AND METHOD FOR EFFECTUATING DISTRIBUTED CONSENSUS AMONG MEMBERS OF A PROCESSOR SET IN A MULTIPROCESSOR COMPUTING SYSTEM THROUGH THE USE OF SHARED STORAGE RESOURCES |
| 82167752     | Granted   | 7817583       | 4/28/2003   | 10/19/2010 | 10/425690          | US | METHOD FOR VERIFYING A STORAGE AREA NETWORK CONFIGURATION                                                                                                                  |
| 82173185     | Granted   | 7152077       | 5/16/2003   | 39070      | 10/440531          | US | SYSTEM FOR REDUNDANT STORAGE OF DATA                                                                                                                                       |
| 82179926     | Granted   | 8493839       | 11/20/2003  | 41478      | 10/717730          | US | Method And System Of Teamed Network Adapters With Offloaded Connections                                                                                                    |
| 82190477     | Granted   | 8006056       | 1/30/2004   | 8/23/2011  | 10/769659          | US | Storage System Including Capability To Move A Virtual Storage Device Group Without Moving Data                                                                             |
| 82194782     | Granted   | 8059539       | 12/29/2004  | 11/15/2011 | 11/027170          | US | Link Throughput Enhancer                                                                                                                                                   |
| 82198589     | Granted   | 7555644       | 7/21/2006   | 6/30/2009  | 11/459030          | US | SYSTEM AND METHOD FOR OPERATING SYSTEM IMAGE PROVISIONING IN A UTILITY COMPUTING ENVIRONMENT                                                                               |
| 82204337     | Granted   | 8214844       | 4/29/2005   | 7/3/2012   | 11/118895          | US | Systems And Methods For Adjusting Service Queue Capacity                                                                                                                   |
| 82205144     | Granted   | 8127088       | 1/27/2005   | 2/28/2012  | 11/044962          | US | Intelligent Cache Management                                                                                                                                               |
| 82206956     | Granted   | 7426633       | 5/12/2005   | 9/16/2008  | 11/127650          | US | System And Method For Reflashing Disk Drive Firmware                                                                                                                       |
| 82211702     | Granted   | 7809919       | 7/26/2006   | 10/5/2010  | 11/493154          | US | Automatic Data Block Misalignment Detection And Correction In A Computer System Utilizing A Hard Disk Subsystem                                                            |
| 82214762     | Published |               | 11/30/2005  |            | 11/289554          | US | A Method Or Apparatus For Processing Data In A System Management Application Program                                                                                       |
| 82218320     | Granted   | 7546485       | 8/15/2006   | 6/9/2009   | 11/505097          | US | Method And System For Efficient Journal-based Resynchronization                                                                                                            |
| 82220882     | Granted   | 8650271       | 7/31/2008   | 2/11/2014  | 12/183063          | US | Cluster Management System And Method                                                                                                                                       |
| 82225124     | Granted   | 7856489       | 5/24/2007   | 12/21/2010 | 11/805592          | US | Simplify Server Replacement                                                                                                                                                |
| 82229804     | Published |               | 7/16/2008   |            | 12/174405          | US | Terminal And Method For Receiving Data In A Network                                                                                                                        |
| 82240610     | Granted   | 8891233       | 3/10/2008   | 11/18/2014 | 12/921712          | US | Cable Management Module                                                                                                                                                    |

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| 82242170     | Granted   | 8020035       | 9/30/2008   | 9/13/2011  | 12/242022          | US | Expander Circuit For A Solid State Persistent Storage Device That Provides A Plurality Of Interfaces To Corresponding Storage Controllers |
| 82248722     | Granted   | 8184982       | 12/20/2008  | 5/22/2012  | 12/340700          | US | Data Reporting Systems And Methods                                                                                                        |
| 82249787     | Published |               | 4/15/2009   |            | 12/424076          | US | PROVIDING INFORMATION RELATING TO USAGE OF A SIMULATED SNAPSHOT                                                                           |
| 82250099     | Granted   | 8261018       | 7/11/2009   | 41156      | 12/501410          | US | Managing Data Storage Systems                                                                                                             |
| 82250720     | Granted   | 8335891       | 7/14/2009   | 12/18/2012 | 12/502485          | US | METHOD AND SYSTEM FOR CONFIGURING A STORAGE ARRAY                                                                                         |
| 82259150     | Granted   | 8482429       | 3/8/2010    | 7/9/2013   | 12/719330          | US | Sensing Environmental Conditions Using RFID                                                                                               |
| 82259213     | Published |               | 1/11/2010   |            | 12/685471          | US | Network Physical Layer Security                                                                                                           |
| 82262150     | Granted   | 8694699       | 6/4/2010    | 4/8/2014   | 12/794594          | US | PATH SELECTION FOR APPLICATION COMMANDS                                                                                                   |
| 82265270     | Granted   | 8726261       | 4/6/2011    | 5/13/2014  | 13/081132          | US | ZERO DOWNTIME HARD DISK FIRMWARE UPDATE                                                                                                   |
| 82408613     | Granted   | 8966476       | 5/28/2008   | 2/24/2015  | 12/995032          | US | Providing Object-level Input/output Requests Between Virtual Machines To Access A Storage Subsystem                                       |
| 82578763     | Granted   | 6658478       | 8/4/2000    | 12/2/2003  | 09/633088          | US | Data Storage System                                                                                                                       |
| 82578777     | Granted   | 7743031       | 9/4/2003    | 6/22/2010  | 10/655951          | US | Time and Space Efficient Technique for Creating Virtual Volume Copies                                                                     |
| 82578840     | Granted   | 7165156       | 9/4/2003    | 1/16/2007  | 10/655961          | US | Read-Write Snapshots                                                                                                                      |
| 82578843     | Granted   | 7590985       | 7/12/2002   | 9/15/2009  | 10/194606          | US | Cluster Inter-Process Communication Transport                                                                                             |
| 82578846     | Granted   | 6965957       | 7/12/2002   | 11/15/2005 | 10/194685          | US | Automatic Cluster Join Protocol                                                                                                           |
| 82578929     | Granted   | 7911222       | 10/1/2009   | 3/22/2011  | 12/571740          | US | Mix Mode Driver for Traces of Different Lengths                                                                                           |
| 82618886     | Published |               | 3/30/2011   |            | 13/076277          | US | TRANSCIEVER FOR DIFFERENT VENDOR DEVICES                                                                                                  |
| 82662232     | Granted   | 8787021       | 6/17/2011   | 7/22/2014  | 13/163369          | US | Memory Cooler                                                                                                                             |
| 82846408     | Granted   | 8633398       | 10/25/2011  | 1/21/2014  | 13/281110          | US | Circuit Board Contact Pads                                                                                                                |
| 82853186     | Published |               | 1/15/2010   |            | 13/259967          | US | Storing Data Relating To Cables                                                                                                           |
| 82961673     | Published |               | 7/25/2012   |            | 13/557443          | US | ZONING RECORD UPDATE                                                                                                                      |
| 82961988     | Granted   | 9143432       | 4/10/2012   | 9/22/2015  | 13/443793          | US | EXPANDER-TARGETED ZONED BROADCAST                                                                                                         |
| 83010661     | Granted   | 8856306       | 8/27/2012   | 10/7/2014  | 13/595693          | US | DETERMINING AN ACTIVE ZONE MANAGER BASED ON DISRUPTION PREDICTION METRICS                                                                 |
| 83014454     | Granted   | 9032071       | 7/24/2012   | 5/12/2015  | 13/556667          | US | SYSTEMS AND METHODS FOR REPRESENTING A SAS FABRIC                                                                                         |
| 83119775     | Granted   | 8788724       | 11/30/2012  | 7/22/2014  | 13/690354          | US | STORAGE DEVICE TO PROVIDE ACCESS TO STORAGE RESOURCES OVER A DATA STORAGE FABRIC                                                          |
| 83137591     | Granted   | D699721       | 1/25/2013   | 2/18/2014  | 29/444111          | US | Hard Drive Carrier                                                                                                                        |
| 83139400     | Published |               | 4/30/2013   |            | 13/873416          | US | DETERMINING A LOOP SET IDENTIFYING PORTS OF A ROUTING MODULE CONNECTED IN A STORAGE FABRIC LOOP                                           |
| 83206779     | Granted   | 9058295       | 4/25/2013   | 6/16/2015  | 13/870820          | US | ENCRYPT DATA OF STORAGE DEVICE                                                                                                            |



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| 83230340     | Published   |               | 10/28/2010  |            | 13/879805          | US | ZONING DATA TO A VIRTUAL MACHINE                                                                                |
| 83793393     | Published   |               | 10/25/2011  |            | 14/235572          | US | DRIVE CARRIER LIGHT SOURCE CONTROL                                                                              |
| 84072047     | Published   |               | 6/28/2012   |            | 14/400787          | US | MEMORY MODULE WITH A DUAL-PORT BUFFER                                                                           |
| 84141201     | Application |               | 12/19/2012  |            | 14/433671          | US | NVRAM PATH SELECTION                                                                                            |
| 84215539     | Application |               | 3/28/2013   |            | 14/765057          | US | ADDRESS RANGE TRANSFER FROM FIRST NODE TO SECOND NODE                                                           |
| 84241573     | Application |               | 5/8/2015    |            | 14/707530          | US | ENCRYPT DATA OF STORAGE DEVICE                                                                                  |
| 90054366     | Application |               | 9/23/2015   |            | 14/863044          | US | STORAGE FABRIC ADDRESS BASED DATA BLOCK RETRIEVAL                                                               |
| 81952361     | Granted     | 5928346       | 6/11/1997   | 7/27/1999  | 08/873348          | US | METHOD FOR ENHANCED PERIPHERAL COMPONENT INTERCONNECT BUS SPLIT DATA TRANSFER                                   |
| 82098827     | Granted     | 7003591       | 8/20/2003   | 2/21/2006  | 10/644291          | US | Configurable Mapping Of Devices To Bus Functions                                                                |
| 82105256     | Granted     | 7623482       | 7/23/2003   | 11/24/2009 | 10/625291          | US | System And Method For Effectuating The Transfer Of Data Blocks Including A Header Block Across A Clock Boundary |
| 82127984     | Granted     | 5809186       | 7/31/1997   | 9/15/1998  | 08/905813          | US | DELIVERING MULTIPLE OPTICAL SIGNALS USING LIGHT THAT DOES NOT CARRY THE DATA                                    |
| 82129976     | Granted     | 6222846       | 4/22/1998   | 4/24/2001  | 09/064409          | US | METHOD AND SYSTEM FOR EMPLOYING A NON-MASKING INTERRUPT AS AN INPUT-OUTPUT PROCESSOR INTERRUPT                  |
| 82132724     | Granted     | 6226699       | 6/25/1998   | 5/1/2001   | 09/104845          | US | METHOD AND APPARATUS FOR CLOCK SELECTION AND SWITCHING                                                          |
| 82132790     | Granted     | 6510522       | 11/20/1998  | 37642      | 09/196849          | US | APPARATUS AND METHOD FOR PROVIDING ACCESS SECURITY TO A DEVICE COUPLED UPON A TWO-WIRE BIDIRECTIONAL BUS        |
| 82191410     | Granted     | 8176204       | 6/9/2006    | 5/8/2012   | 11/450491          | US | System And Method For Multi-Host Sharing Of A Single-Host Device                                                |
| 82191413     | Published   |               | 10/27/2006  |            | 11/553682          | US | System And Methods For Multi-host Extension Of A Hierarchical Interconnect Network                              |
| 82217693     | Granted     | 8922585       | 10/24/2006  | 12/30/2014 | 11/585756          | US | Display Controller                                                                                              |
| 82220819     | Granted     | 6985967       | 7/20/2000   | 1/10/2006  | 09/620106          | US | Web Server Network System And Method                                                                            |
| 82238177     | Granted     | 8903989       | 4/28/2008   | 12/2/2014  | 12/937693          | US | ADJUSTABLE SERVER-TRANSMISSION RATES OVER FIXED-SPEED BACKPLANE CONNECTIONS WITHIN A MULTI-SERVER ENCLOSURE     |
| 82241609     | Granted     | 9037768       | 4/28/2008   | 5/19/2015  | 12/937685          | US | VIRTUAL-INTERRUPT-MODE INTERFACE AND METHOD FOR VIRTUALIZING AN INTERRUPT MODE                                  |
| 82672010     | Granted     | 8930742       | 12/16/2008  | 1/6/2015   | 13/133372          | US | CLOCK SIGNALS FOR DYNAMIC RECONFIGURATION OF COMMUNICATION LINK BUNDLES                                         |
| 82816581     | Granted     | 8798126       | 10/31/2011  | 8/5/2014   | 13/285526          | US | Receiver Calibration Using Offset-Data Error Rates                                                              |
| 82892396     | Granted     | 8745238       | 7/17/2009   | 6/3/2014   | 13/375197          | US | Virtual Hot Inserting Functions In A Shared I/O Environment                                                     |
| 83153071     | Published   |               | 3/27/2013   |            | 13/851750          | US | SERVER NODE                                                                                                     |
| 83976192     | Published   |               | 1/31/2012   |            | 14/366316          | US | CONNECTOR DETECTION                                                                                             |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------|
| 83980646     | Published   |               | 3/8/2012    |            | 14/368354          | US | DIAGNOSTIC MODULE                                                                                               |
| 84004539     | Published   |               | 8/13/2014   |            | 14/459077          | US | METHODS AND SYSTEMS FOR AN INTERPOSER BOARD                                                                     |
| 84026946     | Published   |               | 4/25/2012   |            | 14/379554          | US | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASER                                                                |
| 90057801     | Application |               | 9/18/2015   |            | 14/858601          | US | OPERATING VERTICAL-CAVITY SURFACE-EMITTING LASER                                                                |
| 82062986     | Granted     | 7065575       | 11/20/2000  | 6/20/2006  | 09/715045          | US | Cooperative Networking Method And System                                                                        |
| 82244795     | Allowed     |               | 9/5/2008    |            | 12/205685          | US | System And Method For Installing Authentication Credentials To A Network Device                                 |
| 82250225     | Granted     | 9154583       | 10/30/2009  | 10/6/2015  | 12/609990          | US | Methods And Devices For Implementing Network Policy Mechanisms                                                  |
| 82250594     | Granted     | 8612524       | 10/28/2009  | 12/17/2013 | 12/607889          | US | CESSATION OF SENDING NETWORK STATUS MESSAGES TO A SERVER                                                        |
| 82261274     | Granted     | 8442552       | 4/23/2010   | 5/14/2013  | 12/766520          | US | METHOD AND SYSTEM FOR RADIO FREQUENCY COVERAGE PREDICTION IN A MULTI-LEVEL WIRELESS NETWORK                     |
| 84047158     | Published   |               | 3/30/2012   |            | 14/387544          | US | DEFINING A PERIMETER TO MONITOR A WIRELESS DEVICE FOR A VIOLATION OF THE PERIMETER                              |
| 82061927     | Granted     | 6567661       | 3/7/2001    | 5/20/2003  | 09/800682          | US | DISTRIBUTED TELEMETRY METHOD AND SYSTEM                                                                         |
| 82068236     | Granted     | 6587453       | 12/17/1998  | 7/1/2003   | 09/213749          | US | METHOD OF COMMUNICATING FIRST AND SECOND DATA TYPES                                                             |
| 82135475     | Granted     | 6195777       | 11/6/1997   | 2/27/2001  | 08/965608          | US | LOSS RESILIENT CODE WITH DOUBLE HEAVY TAILED SERIES OF REDUNDANT LAYERS                                         |
| 82182980     | Granted     | 7436969       | 9/2/2004    | 10/14/2008 | 10/934200          | US | Method And System For Optimizing Denoising Parameters Using Compressibility                                     |
| 82222439     | Granted     | 8321538       | 9/24/2007   | 11/27/2012 | 11/903601          | US | Autonomous Network Device Configuration Method                                                                  |
| 82266521     | Granted     | 6031873       | 9/6/1996    | 2/29/2000  | 08/709184          | US | Nested Shell Mapping                                                                                            |
| 82266827     | Granted     | 5875176       | 5/2/1997    | 2/23/1999  | 08/850906          | US | Network Adaptor Driver With Destination Based Ordering                                                          |
| 82266833     | Granted     | 6925078       | 2/19/1999   | 8/2/2005   | 09/253418          | US | Network Adaptor Driver With Destination Based Ordering                                                          |
| 82267388     | Granted     | 6005846       | 5/7/1997    | 12/21/1999 | 08/852656          | US | APPARATUS FOR AN IMPROVED ISDN TERMINAL ADAPTER HAVING AUTOMATIC SPID CONFIGURATION AND METHODS FOR USE THEREIN |
| 82267391     | Granted     | 6031848       | 5/7/1997    | 2/29/2000  | 08/852658          | US | Apparatus For An Improved ISDN Terminal Adapter Having Baud Rate Unblocking And Methods for use Therein         |
| 82268081     | Granted     | 6161201       | 2/26/1998   | 12/12/2000 | 09/031102          | US | Method And Apparatus For Concurrent Interaction With A Modern Having An Open Connection                         |
| 82268138     | Granted     | 6266367       | 5/28/1998   | 7/24/2001  | 09/086395          | US | Combined Echo Cancellor And Time Domain Equalizer                                                               |
| 82268141     | Granted     | 6233237       | 2/2/1998    | 5/15/2001  | 09/017221          | US | METHOD AND PROTOCOL FOR CONNECTING DATA CALLS USING R2 SIGNALING                                                |
| 82268516     | Granted     | 6201817       | 5/28/1998   | 3/13/2001  | 09/086390          | US | Memory Based Buffering For A UART Or A Parallel UART Like Interface                                             |
| 82269074     | Granted     | 6243785       | 5/20/1998   | 6/5/2001   | 09/082417          | US | Hardware Assisted Polling For Software Drivers                                                                  |

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| 82269641     | Granted     | 6347347       | 12/17/1999  | 2/12/2002  | 09/465910          | US | MULTICAST DIRECT MEMORY ACCESS STORING SELECTED ONES OF DATA SEGMENTS INTO A FIRST-IN-FIRST-OUT BUFFER AND A MEMORY SIMULTANEOUSLY WHEN ENABLED BY A PROCESSOR |
| 82270637     | Granted     | 6208616       | 10/1/1997   | 3/27/2001  | 08/942169          | US | System For Detecting Errors In A Network                                                                                                                       |
| 82270640     | Granted     | 6052733       | 10/1/1997   | 4/18/2000  | 08/940302          | US | Method Of Detecting Errors In A Network                                                                                                                        |
| 82271201     | Granted     | 7016675       | 9/27/1999   | 3/21/2006  | 09/406321          | US | System And Method For Controlling Telephone Service Using A Wireless Personal Information Device                                                               |
| 82271828     | Granted     | D454861       | 1/20/2000   | 3/26/2002  | 29/117243          | US | Antenna                                                                                                                                                        |
| 82272197     | Granted     | 7512685       | 11/30/2000  | 3/31/2009  | 09/727982          | US | METHOD AND SYSTEM FOR IMPLEMENTING WIRELESS DATA TRANSFERS BETWEEN A SELECTED GROUP OF MOBILE COMPUTING DEVICES                                                |
| 82273007     | Granted     | 6914952       | 1/19/2001   | 7/5/2005   | 09/766241          | US | Superframe Alignment To A Pre-existing ADSL Data Exchange                                                                                                      |
| 82273010     | Granted     | 7277517       | 11/15/2002  | 10/2/2007  | 10/298130          | US | Method For Achieving Symbol Alignment To A Pre-existing ADSL Data Exchange                                                                                     |
| 82273757     | Granted     | 6915448       | 4/24/2002   | 7/5/2005   | 10/128352          | US | Storage Disk Failover and Replacement System                                                                                                                   |
| 82274012     | Granted     | 7298834       | 11/22/2002  | 11/20/2007 | 10/302241          | US | System and Method for Large Capacity Conference Calls                                                                                                          |
| 82274195     | Granted     | 7532618       | 5/2/2005    | 5/12/2009  | 11/120445          | US | Performing Operations On IP Telephony Devices From A Remote Client                                                                                             |
| 82274198     | Granted     | 8515388       | 4/3/2009    | 8/20/2013  | 12/417925          | US | Performing Operations On IP Telephony Devices From A Remote Client                                                                                             |
| 82274324     | Granted     | 7417988       | 6/30/2003   | 8/26/2008  | 10/610521          | US | METHOD AND SYSTEM FOR NETWORK BASED CALL-PICKUP                                                                                                                |
| 82274450     | Application |               | 5/26/2004   |            | 10/854038          | US | Automatic Redirection Of Fax Calls To A Messaging System                                                                                                       |
| 82274636     | Published   |               | 10/27/2005  |            | 11/260785          | US | A System And Method For Receiving A User Message At A Packet-network Telephone                                                                                 |
| 82274948     | Granted     | 8416766       | 6/2/2009    | 4/9/2013   | 12/476482          | US | Method For Implementing Distributed Voice Functions Into Software Applications                                                                                 |
| 82275443     | Granted     | 6219697       | 5/2/1997    | 4/17/2001  | 08/850406          | US | METHOD AND APPARATUS FOR OPERATING THE INTERNET PROTOCOL OVER A HIGH-SPEED SERIAL BUS                                                                          |
| 82613118     | Granted     | 8676968       | 8/9/2011    | 3/18/2014  | 13/206218          | US | Determining Information About A Computing System                                                                                                               |
| 81990257     | Granted     | 7107609       | 7/20/2001   | 9/12/2006  | 09/908602          | US | Stateful Packet Forwarding In A Firewall Cluster                                                                                                               |
| 81998501     | Granted     | 7466668       | 8/24/2001   | 12/16/2008 | 09/339418          | US | Reduced Pin-count System Interface For Gigabit Ethernet Physical Layer Devices                                                                                 |
| 82001120     | Granted     | 7346672       | 3/12/2002   | 3/18/2008  | 10/098941          | US | Automatic TFTP Firmware Download                                                                                                                               |
| 82018349     | Granted     | 5859959       | 4/29/1996   | 1/12/1999  | 08/639605          | US | Computer Network With Devices/Paths Having Redundant Links                                                                                                     |
| 82030337     | Granted     | 6108310       | 9/12/1997   | 8/22/2000  | 08/928062          | US | Display Of Network Traffic Attributes Based On Frequency Distribution                                                                                          |

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| 82035896     | Granted     | 6865160       | 1/11/1999   | 3/8/2005   | 09/228087          | US | Broadcast Tree Determination In Load Balancing Switch Protocols                                        |
| 82088024     | Granted     | 6880056       | 3/28/2002   | 4/12/2005  | 10/109258          | US | Memory Array And Method With Simultaneous Read/Write Capability                                        |
| 82088027     | Granted     | 8397020       | 4/11/2005   | 3/12/2013  | 11/105088          | US | Memory Array And Method With Simultaneous Read/Write Capability                                        |
| 82088273     | Granted     | 7103045       | 3/5/2002    | 9/5/2006   | 10/091691          | US | SYSTEM AND METHOD FOR FORWARDING PACKETS                                                               |
| 82088276     | Granted     | 6954812       | 3/5/2002    | 10/11/2005 | 10/091768          | US | TWO-STAGE ROUND ROBIN ARBITRATION SYSTEM                                                               |
| 82088399     | Granted     | 7570642       | 3/5/2002    | 8/4/2009   | 10/092155          | US | Method And Apparatus For Computing, Storing, And Multiplexing Modified Bytes In A Packet Router        |
| 82097639     | Granted     | 7483537       | 2/10/2003   | 1/27/2009  | 10/364219          | US | SELECTING CACHED RSA KEYS IN RESPONSE TO RSA KEY REQUESTS                                              |
| 82097642     | Granted     | 8290153       | 12/19/2008  | 10/16/2012 | 12/340490          | US | Selecting Cached Rsa-keys In Response To Rsa Key Requests                                              |
| 82102259     | Application |               | 3/15/2004   |            | 10/801434          | US | Communication Protocol                                                                                 |
| 82179803     | Granted     | 8209537       | 3/30/2004   | 6/26/2012  | 10/812607          | US | Secure Information Distribution Between Nodes (network Devices)                                        |
| 82180799     | Granted     | 7623518       | 4/8/2004    | 11/24/2009 | 10/822048          | US | Dynamic Access Control Lists                                                                           |
| 82186544     | Granted     | 7403474       | 1/27/2004   | 39651      | 10/765655          | US | Redundant Router Set Up                                                                                |
| 82204835     | Granted     | 8327031       | 2/8/2005    | 12/4/2012  | 11/054646          | US | Support Chip For Handling Network Chips On A Network Device                                            |
| 82204838     | Granted     | 7894426       | 2/4/2005    | 2/22/2011  | 11/051422          | US | Conduit Port For Network Chips                                                                         |
| 82205519     | Granted     | 7594158       | 8/26/2005   | 40078      | 11/213367          | US | Parity Error Checking And Compare Using Shared Logic Circuitry In A Ternary Content Addressable Memory |
| 82205522     | Granted     | 8473832       | 8/19/2009   | 41450      | 12/543695          | US | Parity Error Checking And Compare Using Shared Logic Circuitry In A Ternary Content Addressable Memory |
| 82205525     | Granted     | 7757152       | 8/18/2005   | 40372      | 11/207357          | US | DATA CORRUPTION SCRUBBING FOR CONTENT ADDRESSABLE MEMORY AND TERNARY CONTENT ADDRESSABLE MEMORY        |
| 82206206     | Granted     | 7596741       | 4/11/2005   | 9/29/2009  | 11/102973          | US | Packet Protection For Header Modification                                                              |
| 82208582     | Granted     | 7506372       | 5/3/2005    | 3/17/2009  | 11/120861          | US | Method And Apparatus For Controlling Connection Rate Of Network Hosts                                  |
| 82214138     | Granted     | 8693375       | 10/17/2006  | 4/8/2014   | 11/581815          | US | Automated Multiple-instance Spanning Tree Reconfiguration                                              |
| 82218005     | Granted     | 7684410       | 10/31/2006  | 3/23/2010  | 11/590050          | US | VLAN Aware Trunks                                                                                      |
| 82218008     | Granted     | 7796613       | 10/31/2006  | 9/14/2010  | 11/590309          | US | Detection Of Mismatched VLAN Tags                                                                      |
| 82218134     | Granted     | 8203970       | 10/16/2006  | 6/19/2012  | 11/581974          | US | Method And Apparatus For Selecting Spanning Tree Root                                                  |
| 82218317     | Granted     | 8660964       | 6/30/2006   | 2/25/2014  | 11/477863          | US | Secure Device Licensing                                                                                |
| 82218635     | Granted     | 8611254       | 10/31/2006  | 12/17/2013 | 11/590120          | US | Systems And Methods For Configuring A Network For Multicasting                                         |

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| 82219316     | Granted   | 8614954       | 10/26/2006  | 41632      | 11/553108          | US | Network Path Identification                                                                                            |
| 82220945     | Granted   | 7515428       | 10/31/2006  | 47712009   | 11/590144          | US | Design For Automatic Positioning Of Power Supply Modules                                                               |
| 82225748     | Granted   | 8131841       | 7/1/2008    | 3/6/2012   | 12/165668          | US | Handle                                                                                                                 |
| 82225874     | Granted   | 8089960       | 1/31/2007   | 1/3/2012   | 11/669813          | US | Method And Apparatus For Detecting Predefined Signals In Packet Payload                                                |
| 82228118     | Granted   | 8453198       | 12/27/2007  | 5/28/2013  | 11/965262          | US | HIGHLY FLEXIBLE AND EFFICIENT MAC TO PHY INTERFAC                                                                      |
| 82228499     | Granted   | 7873054       | 9/12/2007   | 40561      | 11/853841          | US | Policy Based, Delegated Limited Network Access Management                                                              |
| 82229432     | Granted   | 7860026       | 3/7/2007    | 40540      | 11/714940          | US | Pattern Matching In A Network Flow Across Multiple Packets                                                             |
| 82229621     | Granted   | 8910275       | 2/14/2007   | 41982      | 11/705963          | US | NETWORK SWITCH DEPLOYMENT                                                                                              |
| 82230059     | Granted   | 7895430       | 7/24/2007   | 40596      | 11/880913          | US | NETWORK MONITORING                                                                                                     |
| 82230119     | Granted   | 7706267       | 3/6/2007    | 40295      | 11/714596          | US | On-chip Logic Analyzer Using Compression                                                                               |
| 82230122     | Granted   | 8121030       | 3/9/2010    | 40960      | 12/720015          | US | NETWORK SERVICE MONITORING                                                                                             |
| 82230680     | Granted   | 7570640       | 4/9/2007    | 40029      | 11/784664          | US | NETWORK SERVICE MONITORING                                                                                             |
| 82231241     | Granted   | 7852653       | 6/4/2007    | 40526      | 11/810124          | US | Locating Original Port Information                                                                                     |
| 82240544     | Granted   | 7808982       | 6/3/2008    | 40456      | 12/156684          | US | Content Addressable Memory                                                                                             |
| 82240547     | Granted   | 7917801       | 12/4/2008   | 40631      | 12/328624          | US | METHOD FOR VERIFYING SHARED STATE SYNCHRONIZATION OF REDUNDANT MODULES IN A HIGH AVAILABILITY NETWORK SWITCH           |
| 82245476     | Granted   | 9077628       | 5/15/2008   | 42192      | 12/152552          | US | Systems And Methods For Managing Network Communications                                                                |
| 82247042     | Granted   | 9112879       | 5/12/2009   | 8/18/2015  | 12/464303          | US | Network Device And Method Of Operating The Same                                                                        |
| 82247291     | Granted   | 8964763       | 2/9/2010    | 2/24/2015  | 12/703168          | US | Location Determined Network Access                                                                                     |
| 82247474     | Granted   | 8891358       | 10/6/2009   | 11/18/2014 | 12/574474          | US | INTER-ROUTER COMMUNICATION METHOD AND MODULE                                                                           |
| 82249913     | Granted   | 8417954       | 2/11/2009   | 4/9/2013   | 12/369537          | US | Method For Application Broadcast Forwarding For Routers Running Redundancy Protocols                                   |
| 82250162     | Granted   | 8983938       | 2/6/2009    | 3/17/2015  | 12/367081          | US | Installation Image Including Digital Signature                                                                         |
| 82250222     | Published |               | 10/30/2009  |            | 12/610018          | US | Selecting A Command File                                                                                               |
| 82251344     | Granted   | 8018900       | 12/28/2006  | 9/13/2011  | 11/646904          | US | Methods And Devices For Implementing Configuration Synchronization                                                     |
| 82259711     | Granted   | 8537859       | 2/26/2010   | 9/17/2013  | 12/714215          | US | Seamless Roaming Across Wireless Subnets Using Source Address Forwarding                                               |
| 82264643     | Granted   | 8353718       | 12/17/2010  | 1/15/2013  | 12/971090          | US | REASSEMBLY OF MINI-PACKETS IN A BUFFER                                                                                 |
| 82264766     | Granted   | 8157593       | 12/16/2010  | 4/17/2012  | 12/969611          | US | HANDLE ASSEMBLY FOR ELECTRICAL CONNECTION WITH A GROUNDING MECHANISM                                                   |
|              |           |               |             |            |                    |    | Panel with aperture for receiving a connector module and EMI shield comprising elongate members of conductive material |

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| 82265078     | Granted | 8654652       | 5/30/2011   | 2/18/2014  | 13/118496          | US | SYSTEM FOR MANAGING THE SIZE OF A HARDWARE ROUTING TABLE                                                               |
| 82266452     | Granted | 5754790       | 5/1/1996    | 35934      | 08/641506          | US | Apparatus And Method For Selecting Improved Routing In An Autonomous System Of Computer Networks                       |
| 82266515     | Granted | 5949786       | 10/2/1996   | 9/7/1999   | 08/724742          | US | Stochastic Circuit Identification In A Multi-protocol Network Switch                                                   |
| 82266578     | Granted | 6018763       | 5/28/1997   | 36550      | 08/858182          | US | High Performance shared Memory For A Bridge Router Supporting cache Coherency                                          |
| 82266581     | Granted | 5968176       | 5/29/1997   | 36452      | 08/865482          | US | Multilayer Firewall System                                                                                             |
| 82266701     | Granted | 5966382       | 5/30/1997   | 36445      | 08/866566          | US | Network Communications Using Sine Waves                                                                                |
| 82266707     | Granted | 6151323       | 1/15/1998   | 36851      | 09/007800          | US | Method of supporting unknown addresses in an interface for data transmission in an asynchronous transfer mode          |
| 82266767     | Granted | 6252532       | 2/26/1998   | 37068      | 09/031368          | US | Programmable Compensation and Frequency Equalization For Network Systems                                               |
| 82266770     | Granted | 5892922       | 2/28/1997   | 36256      | 08/808021          | US | Virtual Local Area Network Memory Access System                                                                        |
| 82267076     | Granted | 6028862       | 5/8/1997    | 36578      | 08/853326          | US | Fast Path Networking                                                                                                   |
| 82267265     | Granted | 6101554       | 6/15/1998   | 8/8/2000   | 08/973177          | US | APPARATUS FOR CONTROLLING DATA FLOW USING LOOKUP TABLES TO LINK INCOMING PACKETS DIRECTLY TO OUTPUT PORTS              |
| 82267577     | Granted | 6009274       | 6/24/1997   | 12/28/1999 | 08/881517          | US | Method And Apparatus For Automatically Updating Software Components On End Systems Over A Network                      |
| 82267640     | Granted | 6169744       | 1/7/1998    | 1/2/2001   | 09/003844          | US | METHOD AND PROTOCOL FOR A MEDIUM ACCESS CONTROL LAYER FOR LOCAL AREA NETWORKS WITH MULTIPLE-PRIORITY TRAFFIC           |
| 82267643     | Granted | 6937610       | 10/6/2000   | 38594      | 09/680910          | US | METHOD AND PROTOCOL FOR A MEDIUM ACCESS CONTROL LAYER FOR LOCAL AREA NETWORKS WITH MULTIPLE-PRIORITY TRAFFIC           |
| 82267706     | Granted | 6226769       | 2/3/1999    | 5/1/2001   | 09/243955          | US | Forward Error Correction System For Packet Based Real Time Media                                                       |
| 82268012     | Granted | 6000042       | 8/25/1997   | 36501      | 08/918013          | US | Fault Detection On A Dual Supply System For A Universal Serial Bus System                                              |
| 82268015     | Granted | 6170062       | 12/6/1999   | 36893      | 09/455586          | US | Fault Detection On A Dual Supply System For A Universal Serial Bus System                                              |
| 82268144     | Granted | 6166917       | 1/7/1998    | 36886      | 09/003627          | US | Techniques Of Assembling Modular Electronic Equipment                                                                  |
| 82268201     | Granted | 5983282       | 3/11/1998   | 36473      | 09/038435          | US | METHOD AND SYSTEM FOR COMPUTER NETWORK ACCESS USING COOPERATING NON-DEDICATED REMOTE ACCESS SERVER                     |
| 82268204     | Granted | 6108350       | 3/9/1998    | 36760      | 09/038711          | US | Method and Apparatus For Detecting The Protocol Used By An End Station And Negotiating A Protocol Used By The Endpoint |

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| 82268207     | Granted | 5978951       | 9/11/1997   | 11/2/1999  | 08/927336          | US | HIGH SPEED CACHE MANAGEMENT UNIT FOR USE IN A BRIDGE/ROUTER                                                        |
| 82268264     | Granted | 6094659       | 9/26/1997   | 7/25/2000  | 08/938851          | US | WEB SERVER FOR USE IN A LAN MODEM                                                                                  |
| 82268387     | Granted | 6145010       | 7/14/1998   | 11/7/2000  | 09/114975          | US | METHOD AND APPARATUS FOR BANDWIDTH CONTROL AND OVER SUBSCRIBED COMPUTER NETWORK SWITCH                             |
| 82268453     | Granted | 5978852       | 1/6/1998    | 11/2/1999  | 09/003230          | US | A LAN SWITCH INTERFACE FOR PROVIDING ARBITRATION BETWEEN DIFFERENT SIMULTANEOUS MEMORY ACCESS REQUESTS             |
| 82268765     | Granted | 6141344       | 3/19/1998   | 10/31/2000 | 09/044293          | US | COHERENCE MECHANISM FOR DISTRIBUTED ADDRESS CACHES IN A NETWORK SWITCH                                             |
| 82268768     | Granted | 6262984       | 5/12/1998   | 7/17/2001  | 09/076687          | US | Method Of Preventing Overlapping Branches In Point To Multipoint Calls In PNNI Networks                            |
| 82268825     | Granted | 6269099       | 7/1/1998    | 7/31/2001  | 09/108935          | US | Protocol And Method For Peer Network Device Discovery                                                              |
| 82268828     | Granted | 6092108       | 3/19/1998   | 7/18/2000  | 09/044804          | US | Dynamic Threshold Packet Filtering Of Application Processor Frames                                                 |
| 82268888     | Granted | 6049258       | 5/11/1998   | 4/11/2000  | 09/075373          | US | Isolation And Signal Filter Transformer                                                                            |
| 82269014     | Granted | 6223149       | 5/28/1998   | 4/24/2001  | 09/085918          | US | NON-DISTRIBUTED LAN EMULATION SERVER REDUNDANCY METHOD                                                             |
| 82269200     | Granted | 6167567       | 5/5/1998    | 12/26/2000 | 09/073054          | US | TECHNIQUE FOR AUTOMATICALLY UPDATING SOFTWARE STORED ON A CLIENT COMPUTER IN A NETWORKED CLIENT-SERVER ENVIRONMENT |
| 82269326     | Granted | 6159037       | 11/5/1998   | 12/12/2000 | 09/187175          | US | Illuminated Connector                                                                                              |
| 82269386     | Granted | 5903615       | 5/29/1998   | 5/11/1999  | 09/087626          | US | Low Complexity Frequency Estimator And Interference Cancellation Method And Device                                 |
| 82269392     | Granted | 6201809       | 5/28/1998   | 3/13/2001  | 09/086245          | US | PORT REDUNDANCY AND BACKPRESSURE TRANSLATION TABLE APPARATUS                                                       |
| 82269761     | Granted | 6327662       | 9/30/1998   | 12/4/2001  | 09/164209          | US | IMPROVED SECURITY THROUGH THE USE OF TOKENS AND AUTOMATICALLY DOWNLOADED APPLETS                                   |
| 82269767     | Granted | 6912589       | 3/30/1999   | 6/28/2005  | 09/281726          | US | System and Method for Efficiently Handling Multicast Packets By Ignoring VLAN Context                              |
| 82270013     | Granted | 6397260       | 3/8/1999    | 5/28/2002  | 09/264473          | US | Automatic Load Sharing For Network Routers                                                                         |
| 82270139     | Granted | 6609197       | 4/22/1999   | 8/19/2003  | 09/296192          | US | Method And System For Secure Emergency Access To Network Devices                                                   |
| 82270202     | Granted | 6704282       | 6/30/1999   | 3/9/2004   | 09/345662          | US | VPN Tunnel Redirection                                                                                             |
| 82270511     | Granted | 6724723       | 5/26/1999   | 4/20/2004  | 09/320169          | US | Method Of Providing A Signaling Qualification Function In A Connection Oriented Network                            |
| 82270703     | Granted | 6704292       | 11/22/1999  | 3/9/2004   | 09/447090          | US | Use Of Remote Poll To Facilitate Determining Network Topology                                                      |
| 82270886     | Granted | 6766367       | 2/8/2000    | 7/20/2004  | 09/500405          | US | Method and Apparatus For Fetching Sparsely Indexed MIB Tables In Managed Network Systems                           |

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| 82271321     | Granted   | 7283525       | 1/17/2001   | 10/16/2007 | 09/760721          | US | MULTI-PORT NETWORK COMMUNICATION DEVICE WITH SELECTIVE MAC ADDRESS FILTERING                       |
| 82271390     | Granted   | 7139250       | 4/30/2003   | 11/21/2006 | 10/426183          | US | Advanced Ethernet Auto Negotiation                                                                 |
| 82271450     | Granted   | 6419506       | 1/20/2000   | 7/16/2002  | 09/488668          | US | Combination Miniature Cable Connector And Antenna                                                  |
| 82271822     | Granted   | 6778664       | 3/14/2000   | 8/17/2004  | 09/525201          | US | Line Current Protection Circuit And Method For Linear And Nonlinear Hold Circuit                   |
| 82271888     | Granted   | 7257739       | 8/8/2001    | 8/14/2007  | 09/924955          | US | Diagnosis of Link Failures in a Network                                                            |
| 82272137     | Granted   | 6882622       | 8/2/2000    | 4/19/2005  | 09/630955          | US | Flow control System for Network Devices                                                            |
| 82272446     | Granted   | 6801950       | 9/25/2000   | 10/5/2004  | 09/668339          | US | STACKABLE NETWORK UNIT INCLUDING REGISTER FOR IDENTIFYING TRUNK CONNECTION STATUS OF STACKED UNITS |
| 82272449     | Granted   | 6396169       | 2/29/2000   | 5/28/2002  | 09/515791          | US | Intelligent Power Supply Control For Electronic Systems Requiring Multiple Voltages                |
| 82272452     | Granted   | 6651178       | 2/29/2000   | 11/18/2003 | 09/515562          | US | Communication Module Having Power Supply Requirement Identification                                |
| 82272572     | Granted   | 6704016       | 5/8/2000    | 3/9/2004   | 09/566828          | US | Method And Apparatus For The Graphical Presentation Of Selected Data                               |
| 82272824     | Granted   | 7062569       | 1/19/2001   | 6/13/2006  | 09/764412          | US | CASCADE CONTROL ARCHITECTURE AND OPERATION FOR PACKET-BASED COMMUNICATION SYSTEMS                  |
| 82273319     | Granted   | 7385939       | 7/2/2001    | 39609      | 09/897525          | US | Network Management Apparatus and Method for Determining the Topology of a Network                  |
| 82273325     | Granted   | 7673035       | 7/2/2001    | 40239      | 09/897518          | US | Apparatus and Method for Processing Data Relating to Events on a Network                           |
| 82273571     | Granted   | 7194004       | 1/28/2002   | 39161      | 10/060112          | US | Method for managing network access                                                                 |
| 82273634     | Granted   | 6996110       | 8/31/2001   | 2/7/2006   | 09/943971          | US | Distributed MPLS Architecture                                                                      |
| 82273883     | Granted   | 7283555       | 6/25/2002   | 10/16/2007 | 10/179440          | US | Method and Apparatus for Determining a Polling Interval in a Network Management System             |
| 82273946     | Granted   | 7167441       | 2/8/2002    | 1/23/2007  | 10/067965          | US | CASCADE CONTROL SYSTEM FOR NETWORKS UNITS                                                          |
| 82274381     | Granted   | 8274975       | 1/12/2009   | 9/25/2012  | 12/352207          | US | SYSTEM AND METHOD FOR AUTOMATICALLY MANAGING A NETWORK PORT BASED ON A CALENDAR FUNCTION           |
| 82274387     | Granted   | 7702903       | 8/8/2005    | 4/20/2010  | 11/199951          | US | LICENSE RE-ALLOCATION SYSTEM AND METHOD                                                            |
| 82274444     | Granted   | 8943241       | 9/9/2004    | 42031      | 10/938292          | US | A Communication Device Ingress Information Management System And Method                            |
| 82274507     | Granted   | 7975048       | 8/18/2009   | 7/5/2011   | 12/543069          | US | Network Including Snooping                                                                         |
| 82274573     | Granted   | 7802094       | 2/22/2005   | 40442      | 11/064225          | US | REDUCTION OF FALSE POSITIVE DETECTION OF SIGNATURE MATCHES IN INTRUSION DETECTION SYSTEMS          |
| 82651054     | Granted   | 8611351       | 2/14/2011   | 12/17/2013 | 13/026803          | US | Marked Packet Forwarding                                                                           |
| 82743829     | Granted   | 8055768       | 5/27/2011   | 40855      | 13/118010          | US | Network Service Provisioning Using DHCP Snooping                                                   |
| 82772027     | Published |               | 1/30/2009   |            | 13/146148          | US | Dynamically Applying A Control Policy To A Network                                                 |

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| 82834978     | Granted     | 8291060       | 9/20/2011   | 10/16/2012 | 13/237660          | US | PROVIDING INFORMATION CORRESPONDING TO A DATA GROUP IDENTIFIER FOR A NETWORK INTERCONNECT DEVICE                                                           |
| 82852256     | Granted     | 8275818       | 10/4/2011   | 9/25/2012  | 13/252776          | US | Positionally dependent pattern checking in character strings using deterministic finite automata                                                           |
| 82858619     | Allowed     |               | 1/31/2012   |            | 13/362159          | US | CONFIGURATION FILE COMPATIBILITY                                                                                                                           |
| 82961653     | Allowed     |               | 6/15/2012   |            | 13/524670          | US | SWITCH IDENTIFICATION                                                                                                                                      |
| 82962529     | Published   |               | 7/31/2012   |            | 13/563156          | US | Selection of one of first and second link between first and second network devices                                                                         |
| 82963614     | Granted     | 8948177       | 7/30/2012   | 2/3/2015   | 13/561610          | US | POLICY BASED ROUTING                                                                                                                                       |
| 82963628     | Granted     | 9031065       | 4/23/2012   | 5/12/2015  | 13/453373          | US | SWITCH HAVING DEDICATED STACKING LINK                                                                                                                      |
| 82964587     | Granted     | 8879392       | 4/26/2012   | 41947      | 13/456715          | US | BGP SECURITY UPDATE INTERCEPTS                                                                                                                             |
| 83014912     | Granted     | 9071596       | 7/30/2012   | 42185      | 13/562190          | US | SECURELY ESTABLISHING A COMMUNICATION CHANNEL BETWEEN A SWITCH AND A NETWORK-BASED APPLICATION USING A UNIQUE IDENTIFIER FOR THE NETWORK-BASED APPLICATION |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 83030661     | Granted     | 9043618       | 6/15/2012   | 42150      | 13/524215          | US | DRAWING POWER OVER NETWORK CABLE                                                                                                                           |
| 83037491     | Granted     | 9036665       | 1/23/2013   | 42143      | 13/747758          | US | SYSTEM AND METHOD FOR REAL-TIME DETECTION, IDENTIFICATION AND REPORTING OF MAC-SYNC FAILURES IN DISTRIBUTED TRUNKING                                       |
|              |             |               |             |            |                    |    |                                                                                                                                                            |
| 83112384     | Granted     | 8817664       | 9/14/2012   | 8/26/2014  | 13/619542          | US | NETWORK EDGE SWITCH CONFIGURATION BASED ON CONNECTION PROFILE                                                                                              |
| 83132945     | Granted     | 8675652       | 11/16/2012  | 3/18/2014  | 13/679483          | US | Packet Processing With Adjusted Access Control List                                                                                                        |
| 83138375     | Published   |               | 4/25/2013   |            | 13/870650          | US | Heat Sink                                                                                                                                                  |
| 83139769     | Granted     | 9007924       | 1/29/2013   | 42108      | 13/753064          | US | Balancing Load Distributions of Loopback Ports                                                                                                             |
| 83160190     | Granted     | 8904514       | 4/12/2010   | 41975      | 13/640399          | US | IMPLEMENTING A HOST SECURITY SERVICE BY DELEGATING ENFORCEMENT TO A NETWORK DEVICE                                                                         |
| 83205969     | Granted     | 9143419       | 8/13/2013   | 42269      | 13/966010          | US | Measuring Flow Activity On An Openflow Enabled Network Device                                                                                              |
| 83222079     | Granted     | 9148360       | 11/1/2010   | 9/29/2015  | 13/876898          | US | MANAGING MAC MOVES WITH SECURE PORT GROUPS                                                                                                                 |
| 83733353     | Published   |               | 8/15/2011   |            | 14/124299          | US | SYSTEMS, DEVICES, AND METHODS FOR TRAFFIC MANAGEMENT                                                                                                       |
| 83771601     | Published   |               | 8/9/2011    |            | 14/127595          | US | COUNT VALUES TO DETECT DISCONNECTED CIRCUIT                                                                                                                |
| 83991386     | Published   |               | 1/31/2012   |            | 14/372517          | US | DETERMINATION OF SPOOFING OF A UNIQUE MACHINE IDENTIFIER                                                                                                   |
| 84017566     | Published   |               | 3/26/2012   |            | 14/377926          | US | FRAME PASSING BASED ON ETHERTYPE                                                                                                                           |
| 84077517     | Application |               | 7/30/2012   |            | 14/391820          | US | PROVIDER BRIDGED NETWORK COMMUNICATION                                                                                                                     |
| 84089462     | Application |               | 7/10/2012   |            | 14/397433          | US | HOME NETWORK INFORMATION                                                                                                                                   |
| 84168254     | Published   |               | 8/21/2012   |            | 14/422345          | US | CONGESTION NOTIFICATION IN A NETWORK                                                                                                                       |
| 84184524     | Published   |               | 9/27/2012   |            | 14/426414          | US | TRANSMIT SPECIFIC TRAFFIC ALONG BLOCKED LINK                                                                                                               |

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| 90017100     | Application |               | 1/30/2013   |            | 14/763757 US       |    | Sending Traffic Policies                                                                                                             |
| 90056287     | Application |               | 3/15/2013   |            | 14/776759 US       |    | EMULATE VLANs USING MACSEC                                                                                                           |
| 90056994     | Application |               | 6/14/2013   |            | 14/777436 US       |    | LOOP-FREE HYBRID NETWORK                                                                                                             |
| 82265765     | Granted     | 5835855       | 6/12/1996   | 36109      | 08/660965 US       |    | ANTENNA SCANNING SYSTEM WITH LOW FREQUENCY DITHERING                                                                                 |
| 82267766     | Granted     | 6144464       | 2/5/2000    | 11/7/2000  | 08/927693 US       |    | METHOD AND SYSTEM FOR MODIFICATION OF FAX DATA RATE OVER WIRELESS CHANNELS                                                           |
| 82267769     | Granted     | 6038430       | 12/10/1997  | 3/14/2000  | 08/987982 US       |    | Method And Apparatus For Improving Transmission Of Data In A Wireless Network                                                        |
| 82269950     | Granted     | 6778519       | 3/19/1999   | 8/17/2004  | 09/273301 US       |    | Wireless Multiple Function PC Card                                                                                                   |
| 82272263     | Granted     | 6545643       | 9/8/2000    | 4/8/2003   | 09/658140 US       |    | Extendable Planar Diversity Antenna                                                                                                  |
| 82273139     | Granted     | 6920172       | 1/2/2001    | 7/19/2005  | 09/750783 US       |    | Dual Purpose Spread Spectrum Radio Receivers With Controlled Frequency Rejection                                                     |
| 82273196     | Granted     | 6826154       | 5/24/2001   | 11/30/2004 | 09/865110 US       |    | Method And Apparatus For Seamless Mobility Between Different Access Technologies                                                     |
| 82274132     | Granted     | 7130625       | 7/1/2002    | 10/31/2006 | 10/186957 US       |    | System And Method For A Universal Wireless Access Gateway                                                                            |
| 82275317     | Granted     | 6266017       | 11/16/1999  | 7/24/2001  | 08/865553 US       |    | Retractable Antenna System                                                                                                           |
| 82275320     | Granted     | 6618013       | 7/23/2001   | 9/9/2003   | 09/911166 US       |    | RETRACTABLE ANTENNA ASSEMBLY                                                                                                         |
| 82275380     | Granted     | 6219732       | 1/10/1997   | 4/17/2001  | 08/782046 US       |    | Apparatus And Method For Wireless Communication Between A Host and A Selectively Removable Module Electrically Connected To The host |
| 82690141     | Published   |               | 6/29/2011   |            | 13/172545 US       |    | UNSOLICITED BROADCAST PACKET TRANSMISSION THROUGH CLOSE-BY COMMUNICATION PROTOCOL                                                    |
| 82908111     | Granted     | 8396076       | 12/22/2011  | 3/12/2013  | 13/335606 US       |    | System And Method For Roaming Between Wireless Networks                                                                              |
| 83421815     | Published   |               | 6/28/2011   |            | 14/114453 US       |    | METHOD OF ASSOCIATING A CLIENT WITH AN ACCESS POINT IN A WIRELESS LOCAL AREA NETWORK                                                 |
| 83991360     | Published   |               | 1/27/2012   |            | 14/372510 US       |    | INTELLIGENT EDGE DEVICE                                                                                                              |
| 84297073     | Application |               | 7/27/2015   |            | 14/810352 US       |    | MULTICAST ROUTING                                                                                                                    |
| 82061675     | Granted     | 6865598       | 6/8/2001    | 3/8/2005   | 09/875950 US       |    | Utilization Of Unused Disk Space On Networked Computers                                                                              |
| 82233305     | Granted     | 8332404       | 10/24/2008  | 12/11/2012 | 12/257659 US       |    | DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA                                                                              |
| 82250408     | Granted     | 8001273       | 3/16/2009   | 40771      | 12/404842 US       |    | PARALLEL PROCESSING OF INPUT DATA TO LOCATE LANDMARKS FOR CHUNKS                                                                     |
| 82251221     | Published   |               | 7/22/2010   |            | 12/841898 US       |    | Data Deduplication Apparatus And Method For Storing Data Received In A Data Stream From A Data Store                                 |
| 82678505     | Granted     | 8904128       | 6/8/2011    | 12/2/2014  | 13/155566 US       |    | PROCESSING A REQUEST TO RESTORE DEDUPPLICATED DATA                                                                                   |
| 82944092     | Published   |               | 2/7/2012    |            | 13/367567 US       |    | COMMUNICATING CHUNKS BETWEEN DEVICES                                                                                                 |

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| 83782550     | Published   |               | 11/4/2011   |            | 14/235006 US       | US | Fault Processing in a System                                                                                                               |
| 83952382     | Published   |               | 5/1/2012    |            | 14/395491 US       | US | DETERMINING SEGMENT BOUNDARIES FOR DEDUPLICATION                                                                                           |
| 83973132     | Published   |               | 4/24/2012   |            | 14/373360 US       | US | Determining A Schedule For A Job To Replicate An Object Stored On A Storage Appliance                                                      |
| 84215513     | Application |               | 4/30/2013   |            | 14/765183 US       | US | GROUPING CHUNKS OF DATA INTO A COMPRESSION REGION                                                                                          |
| 81970091     | Granted     | 6695242       | 6/29/2000   | 2/24/2004  | 09/606862 US       | US | LEADER PIN SEAT FOR TAPE CARTRIDGE                                                                                                         |
| 81970094     | Granted     | 6874721       | 4/3/2003    | 38447      | 10/406516 US       | US | Leader Pin Seat For Tape Cartridges                                                                                                        |
| 81976832     | Granted     | 6768604       | 6/14/2001   | 7/27/2004  | 09/883020 US       | US | Method For Reduction Of Off-track Errors In Data Storage Tape Systems                                                                      |
| 81978710     | Granted     | 7447761       | 10/5/2000   | 11/4/2008  | 09/679691 US       | US | Device Detection System And Method                                                                                                         |
| 81994811     | Granted     | 6804877       | 4/29/2003   | 10/19/2004 | 10/425256 US       | US | Devices And Methods For Retaining Data Media In A Media Storage Device                                                                     |
| 81995060     | Granted     | 6848114       | 8/23/2001   | 1/25/2005  | 09/935911 US       | US | Bulk Access System For A Data Storage System                                                                                               |
| 82004993     | Granted     | 6980884       | 7/16/2002   | 12/27/2005 | 10/197916 US       | US | Intrusion Monitors For Media Storage Systems                                                                                               |
| 82006865     | Granted     | 7045763       | 6/28/2002   | 5/16/2006  | 10/186458 US       | US | Object-recognition Lock                                                                                                                    |
| 82026401     | Granted     | 5936816       | 7/17/1997   | 36382      | 08/896848 US       | US | Integrated Cleaning And Leader Tape                                                                                                        |
| 82028279     | Granted     | 6111719       | 3/6/1998    | 36767      | 09/036350 US       | US | Linear Speed Measurement Independent Of Lateral Position In Linear Tape Systems                                                            |
| 82029089     | Granted     | 5813622       | 11/12/1997  | 9/29/1998  | 08/968060 US       | US | Tape Cartridge Reel Lock                                                                                                                   |
| 82032644     | Granted     | 6246642       | 4/13/1999   | 6/12/2001  | 09/290926 US       | US | Automated Optical Detection System And Method                                                                                              |
| 82039391     | Granted     | 6231291       | 3/18/1999   | 37026      | 09/271550 US       | US | Method And Apparatus For Exchanging Data Cartridges In A Jukebox Data Storage System                                                       |
| 82040576     | Granted     | 6226252       | 11/6/1998   | 5/1/2001   | 09/188401 US       | US | PICKER SHIPPING LOCK MECHANISM FOR DATA STORAGE SYSTEM                                                                                     |
| 82047131     | Granted     | 6538842       | 5/23/2000   | 37705      | 09/577215 US       | US | Positioning System For Removable Data Storage Cartridges                                                                                   |
| 82052873     | Granted     | 6269411       | 8/12/1999   | 37103      | 09/372821 US       | US | System For Enabling Stacking Of Autochanger Modules                                                                                        |
| 82063865     | Granted     | 7194636       | 4/11/2002   | 3/20/2007  | 10/120140 US       | US | Data Authentication                                                                                                                        |
| 82067675     | Granted     | 6295177       | 10/30/1998  | 37159      | 09/182308 US       | US | METHOD OF AND APPARATUS FOR ARRANGING DATA RECEIVED IN A DATA TRANSFER FROM A DATA SOURCE                                                  |
| 82067732     | Granted     | 6268973       | 10/30/1998  | 7/31/2001  | 09/182306 US       | US | GENERATING APPENDABLE POINTS IN ENCODED DATA                                                                                               |
| 82189037     | Granted     | 7840502       | 10/26/2005  | 40505      | 11/260511 US       | US | METHOD AND AN APPARATUS FOR AUTOMATIC CREATION OF SECURE CONNECTIONS BETWEEN SEGMENTED RESOURCE FARMS IN A UTILITY COMPUTING ENVIRONMENT   |
| 82202153     | Granted     | 8474031       | 6/28/2005   | 41450      | 11/917346 US       | US | Access Control Method And Apparatus                                                                                                        |
| 82215572     | Granted     | 7970143       | 8/5/2005    | 40722      | 11/996972 US       | US | System, Method And Apparatus To Obtain A Key For Encryption/decryption/data Recovery From An Enterprise Cryptography Key Management System |

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| 82251974     | Granted     | 6578029       | 6/6/2002    | 37782      | 10/164511          | US | System and Method for Selectively Defining Access to Application Features                                                                                                              |
| 82252907     | Granted     | 5884312       | 2/28/1997   | 36235      | 08/810498          | US | System and Method for Securely Accessing Information in Disparate Data Sources Through a Network                                                                                       |
| 82254656     | Granted     | 8473321       | 9/25/2002   | 41450      | 10/256227          | US | METHOD AND APPARATUS FOR ASSOCIATING PRIVILEGE WITH PEOPLE IN AN ORGANIZATION                                                                                                          |
| 82255652     | Granted     | 8321946       | 12/5/2003   | 41240      | 10/729398          | US | METHOD AND SYSTEM FOR PREVENTING IDENTITY THEFT IN ELECTRONIC COMMUNICATIONS                                                                                                           |
| 82257338     | Granted     | 9043589       | 11/14/2007  | 42150      | 11/940018          | US | SYSTEM AND METHOD FOR SAFEGUARD AND PROCESSING OF CONFIDENTIAL INFORMATION                                                                                                             |
| 82257464     | Granted     | 8099770       | 1/30/2008   | 1/17/2012  | 12/022952          | US | APPARATUS, AND AN ASSOCIATED METHODOLOGY, FOR FACILITATING AUTHENTICATION USING A DIGITAL MUSIC AUTHENTICATION TOKEN                                                                   |
| 82095458     | Granted     | 7590937       | 10/3/2002   | 9/15/2009  | 10/264975          | US | GRAPHICAL USER INTERFACE FOR PROCUREMENT RISK MANAGEMENT SYSTEM                                                                                                                        |
| 82098389     | Granted     | 7100273       | 3/3/2003    | 9/5/2006   | 10/378241          | US | Interconnect Validation Instruments                                                                                                                                                    |
| 82128983     | Granted     | 5791753       | 8/29/1996   | 8/11/1998  | 08/705402          | US | COMPUTER COMPONENT HANDLE ASSEMBLY                                                                                                                                                     |
| 82132226     | Granted     | 6772192       | 2/29/2000   | 8/3/2004   | 09/515567          | US | SOFTWARE DOWNLOAD AND DISTRIBUTION VIA IMAGE BUILDING AND MULTICAST                                                                                                                    |
| 82901636     | Granted     | 8419447       | 8/31/2009   | 4/16/2013  | 13/375308          | US | SURFACE-MOUNT TECHNOLOGY (SMT) DEVICE CONNECTOR                                                                                                                                        |
| 83725261     | Published   |               | 6/27/2011   |            | 14/125739          | US | TEMPERATURE BAND OPERATION LOGGING                                                                                                                                                     |
| 83929408     | Published   |               | 10/31/2011  |            | 14/352326          | US | REMOTE SOFTWARE DEPLOYMENT ACROSS A NETWORK                                                                                                                                            |
| 84141284     | Application |               | 1/21/2013   |            | 14/435171          | US | PALLETTIZED LOAD REACTANT REGULATION HEATING                                                                                                                                           |
| 82078349     | Granted     | 6886035       | 5/13/2002   | 4/26/2005  | 10/145423          | US | DYNAMIC LOAD BALANCING OF A NETWORK OF CLIENT AND SERVER COMPUTERS                                                                                                                     |
| 82104944     | Granted     | 7340450       | 3/15/2004   | 3/4/2008   | 10/800038          | US | Date Search System And Search Method Using A Global Unique Identifier                                                                                                                  |
| 82227683     | Granted     | 8874517       | 1/31/2007   | 10/28/2014 | 11/700805          | US | SUMMARIZING FILE SYSTEM OPERATIONS WITH A FILE SYSTEM JOURNAL                                                                                                                          |
| 82245725     | Granted     | 8650272       | 9/26/2008   | 41681      | 12/238779          | US | Distributed Transaction Processing System Having Resource Managers That Collaborate To Decide Whether To Commit Or Abort A Transaction In Response To Failure Of A Transaction Manager |
| 82277819     | Granted     | 7263519       | 1/20/2004   | 8/28/2007  | 10/760918          | US | Process For Searching A Repository Of Resources                                                                                                                                        |
| 82651157     | Allowed     |               | 8/18/2011   |            | 13/212371          | US | TRANSITIVE CLOSURE SECURITY                                                                                                                                                            |
| 82722209     | Granted     | 8392439       | 5/31/2011   | 3/5/2013   | 13/149295          | US | Single Repository Manifestation Of A Multi-Repository System                                                                                                                           |
| 82962469     | Published   |               | 4/26/2012   |            | 13/456946          | US | STORING DATA IN CONTAINERS                                                                                                                                                             |

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| 83002048     | Granted     | 8447864       | 5/8/2012    | 41415      | 13/466457          | US | Distributed Differential Store With Non-distributed Objects                              |
| 84141161     | Published   |               | 10/31/2012  |            | 14/418727          | US | And Compression-enhancing Data-object Routing                                            |
| 84170498     | Application |               | 6/11/2015   |            | 14/736504          | US | CATALOGING BACKUP DATA                                                                   |
| 82034456     | Granted     | 6055538       | 12/22/1997  | 36641      | 08/995676          | US | QUERY PLAN DETERMINATION                                                                 |
|              |             |               |             |            |                    |    | Methods And System For Using Web Browser To Search Collections Of Documents              |
| 82034462     | Granted     | 6292802       | 36655       | 37152      | 09/567861          | US | Methods And System For Using Web Browser To Search Collections Of Documents              |
|              |             |               |             |            |                    |    | Method Of Vector Analysis For A Document                                                 |
| 82069919     | Granted     | 7562066       | 11/15/2001  | 7/14/2009  | 10/380264          | US | Method Of Updating Data In A Compressed Data Structure                                   |
| 82097891     | Granted     | 6892207       | 1/24/2003   | 5/10/2005  | 10/350358          | US | Client And Method For Database                                                           |
| 82207460     | Granted     | 8832072       | 5/25/2006   | 9/9/2014   | 11/440118          | US | Document Retrieval                                                                       |
| 82216886     | Granted     | 7827161       | 3/12/2007   | 11/2/2010  | 11/716993          | US | RISK-PREMIUM-BASED DATABASE-QUERY OPTIMIZATION                                           |
| 82245044     | Granted     | 8898142       | 1/29/2009   | 11/25/2014 | 12/322164          | US | METHOD AND SYSTEM FOR PERFORMING TESTING ON A DATABASE SYSTEM                            |
| 82249658     | Published   |               | 6/1/2009    |            | 12/475707          | US | System And Method For Aggregating Data                                                   |
|              |             |               |             |            |                    |    | OPTIMIZING A QUERY                                                                       |
| 82259024     | Published   |               | 10/21/2009  |            | 12/603020          | US | Systems And Methods For Database Query Translation                                       |
| 82262522     | Published   |               | 10/11/2010  |            | 12/901897          | US | MANAGING LOG ENTRIES                                                                     |
| 82263143     | Published   |               | 7/8/2010    |            | 12/832574          | US | SYSTEMS, METHODS, AND APPARATUS FOR ACCESSING OBJECT REPRESENTATIONS OF DATA SETS        |
| 82264271     | Granted     | 8533193       | 11/17/2010  | 41527      | 12/948549          | US | SYSTEMS AND METHODS FOR SEARCHING A SEARCH SPACE OF A QUERY                              |
| 82264391     | Granted     | 9129035       | 10/5/2010   | 9/8/2015   | 12/898530          | US | USER DEFINED FUNCTION CLASSIFICATION IN ANALYTICAL DATA PROCESSING SYSTEMS               |
|              |             |               |             |            |                    |    | USER DEFINED FUNCTIONS FOR DATA LOADING                                                  |
| 82275758     | Published   |               | 1/6/2011    |            | 12/985833          | US | Querying Structured And Unstructured Databases                                           |
|              |             |               |             |            |                    |    | System And Method For Locating A Resource Locator Associated With A Resource Of Interest |
| 82756375     | Published   |               | 9/22/2011   |            | 13/240582          | US | METHOD AND APPARATUS AUTO-DISCOVERING COMPONENTS OF DISTRIBUTED SERVICES                 |
|              |             |               |             |            |                    |    | Apparatus And Method For Process Monitoring                                              |
| 83012742     | Published   |               | 5/31/2012   |            | 13/485246          | US | Computer Networks                                                                        |
| 84156163     | Published   |               | 8/29/2012   |            | 14/424193          | US | VIRTUAL TOPOLOGICAL QUERIES                                                              |
| 81997436     | Granted     | 7693932       | 1/15/2002   | 40274      | 10/047629          | US | SELECTING A PROJECT PORTFOLIO                                                            |
|              |             |               |             |            |                    |    | Trend Determination And Identification                                                   |
| 82055621     | Granted     | 6834303       | 11/13/2000  | 38342      | 09/711785          | US | MERGING AND IGNORING CONFIGURATION ITEMS                                                 |
|              |             |               |             |            |                    |    | LIVE TOPOLOGICAL QUERY                                                                   |
| 82194656     | Granted     | 8275757       | 6/14/2005   | 41177      | 11/153861          | US | COMPUTER NETWORK NODE DISCOVERY                                                          |
| 82226246     | Granted     | 8195487       | 10/16/2007  | 6/5/2012   | 11/872861          | US | IDENTITY BASED AUTOMATED FORM FILLING                                                    |
| 82260146     | Published   |               | 5/26/2010   |            | 12/787593          | US |                                                                                          |
| 82263149     | Published   |               | 7/29/2010   |            | 12/846696          | US |                                                                                          |
| 82675568     | Published   |               | 10/13/2008  |            | 13/123595          | US |                                                                                          |
| 82909007     | Granted     | 9020978       | 3/7/2012    | 42122      | 13/413790          | US |                                                                                          |
| 82964570     | Published   |               | 4/16/2012   |            | 13/448173          | US |                                                                                          |
| 83265986     | Published   |               | 12/11/2010  |            | 13/991468          | US |                                                                                          |
| 83769065     | Published   |               | 6/24/2011   |            | 14/127205          | US |                                                                                          |

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| 84110945     | Published   |               | 12/3/2014   |            | 14/559053 US       | US | COMPARING PROJECTS                                                                                                                                           |
| 84172831     | Application |               | 4/30/2015   |            | 14/700537 US       | US | SERVICE PROVIDER DEPENDENCY MAPPING                                                                                                                          |
| 81967715     | Granted     | 7062557       | 7/10/2000   | 38881      | 09/613007 US       | US | WEB SERVER REQUEST CLASSIFICATION SYSTEM THAT CLASSIFIES REQUESTS BASED ON USERS BEHAVIORS AND EXPECTATIONS                                                  |
| 81982826     | Granted     | 7003564       | 1/17/2001   | 38769      | 09/764563 US       | US | Method And Apparatus For Customizably Calculating And Displaying Health Of A Computer Network                                                                |
| 81982892     | Granted     | 6658367       | 3/28/2001   | 37957      | 09/818730 US       | US | System For Time-Bucketing Of Baseline Data Collector Data                                                                                                    |
| 81993128     | Granted     | 7003578       | 4/26/2001   | 38769      | 09/842130 US       | US | Method And System For Controlling A Policy-Based Network                                                                                                     |
| 81998621     | Granted     | 7293106       | 5/28/2002   | 39392      | 10/154912 US       | US | Method Of Finding A Path Between Two Nodes In A Network                                                                                                      |
| 82001618     | Granted     | 7484209       | 8/12/2003   | 39840      | 10/640626 US       | US | Instrumenting Java Code By Modifying Bytecodes                                                                                                               |
| 82001621     | Granted     | 7496903       | 37845       | 39868      | 10/640623 US       | US | Synthesizing Application Response Measurement (ARM) Instrumentation                                                                                          |
| 82032212     | Granted     | 6061723       | 10/8/1997   | 5/9/2000   | 08/947219 US       | US | Network Management Event Correlation In Environments Containing Inoperative Network Elements                                                                 |
| 82055438     | Granted     | 7051094       | 8/30/2000   | 5/23/2006  | 09/651519 US       | US | Decentralized Management Of Composite Digital Services                                                                                                       |
| 82060055     | Granted     | 7099938       | 3/23/2001   | 8/29/2006  | 09/816940 US       | US | METHOD, COMPUTER SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR MONITORING SERVICES OF AN INFORMATION TECHNOLOGY ENVIRONMENT                                       |
| 82091585     | Granted     | 7478398       | 10/31/2002  | 1/13/2009  | 10/284367 US       | US | MANAGEMENT APPARATUS AND METHOD FOR DATA COLLECTION INCLUDING ACCUMULATING MESSAGES AND DETERMINING MESSAGE HANDLERS FOR PROCESSING THE ACCUMULATED MESSAGES |
| 82097450     | Granted     | 7499984       | 3/23/2004   | 3/3/2009   | 10/806431 US       | US | Status-message Mapping                                                                                                                                       |
| 82098761     | Granted     | 6889169       | 1/31/2003   | 5/3/2005   | 10/356409 US       | US | Collection Of Session-Related Information Using An Extendable Sampling Period                                                                                |
| 82101758     | Granted     | 7398512       | 12/2/2003   | 7/8/2008   | 10/724728 US       | US | Method, System, And Software For Mapping And Displaying Process Objects At Different Levels Of Abstraction                                                   |
| 82177115     | Granted     | 8045560       | 8/28/2009   | 10/25/2011 | 12/461929 US       | US | Method And System For Managing A Network Having Multiple Domains                                                                                             |
| 82178927     | Granted     | 7564796       | 9/30/2004   | 7/21/2009  | 10/953280 US       | US | Method And System For Managing A Network Slowdown                                                                                                            |
| 82183859     | Granted     | 7962916       | 4/5/2005    | 6/14/2011  | 11/098830 US       | US | METHOD OF DISTRIBUTING LOAD AMONGST TWO OR MORE COMPUTER SYSTEM RESOURCES                                                                                    |
| 82189352     | Published   |               | 7/4/2005    |            | 11/993021 US       | US | Device Management Across Firewall Architecture                                                                                                               |
| 82189787     | Granted     | 7643434       | 9/30/2004   | 1/5/2010   | 10/953281 US       | US | Method And System For Managing Network Nodes Which Communicate Via Connectivity Services Of A Service Provider                                               |

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| 82155598     | Granted     | 8572234       | 11/30/2004  | 10/29/2013 | 10/998819          | US | MPIS VPN Fault Management Using IGP Monitoring System                                                                                |
| 82199216     | Granted     | 7936694       | 3/30/2007   | 5/3/2011   | 11/729864          | US | SMEEING-BASED NETWORK MONITORING                                                                                                     |
| 82218443     | Granted     | 8359378       | 11/24/2005  | 1/22/2013  | 12/094740          | US | NETWORK SYSTEM AND METHOD OF ADMINISTRTATING NETWORKS                                                                                |
| 82222064     | Granted     | 7058545       | 9/16/2002   | 6/6/2006   | 10/244816          | US | Software Application Domain And Storage Domain Characterization Process And Method                                                   |
| 82227437     | Granted     | 8526325       | 1/31/2007   | 9/3/2013   | 11/701311          | US | Detecting And Identifying Connectivity In A Network                                                                                  |
| 82228493     | Granted     | 8762355       | 1/23/2008   | 6/24/2014  | 12/018514          | US | Generating Configuration Files                                                                                                       |
| 82233617     | Granted     | 6738813       | 9/11/2000   | 5/18/2004  | 09/659476          | US | SYSTEM AND METHOD FOR MONITORING PERFORMANCE OF A SERVER SYSTEM USING OTHERWISE UNUSED PROCESSING CAPACITY OF USER COMPUTING DEVICES |
| 82235423     | Published   |               | 1/31/2008   |            | 12/864834          | US | Automated Application Dependency Mapping                                                                                             |
| 82235678     | Granted     | 8180723       | 9/27/2008   | 41044      | 12/239747          | US | ROOT CAUSE ANALYSIS IN A SYSTEM HAVING A PLURALITY OF INTER-RELATED ELEMENTS                                                         |
| 82238048     | Granted     | 8302168       | 10/30/2008  | 10/30/2012 | 12/261913          | US | Push Artifact Binding For Communication In A Federated Identity System                                                               |
| 82248596     | Granted     | 8176000       | 5/19/2009   | 5/8/2012   | 12/468676          | US | METHODS AND APPARATUS FOR DISCOVERING TRAFFIC ON A NETWORK                                                                           |
| 82259402     | Granted     | 8254274       | 1/13/2010   | 8/28/2012  | 12/686400          | US | Method For Providing Network Information                                                                                             |
| 82263083     | Granted     | 8352777       | 10/4/2010   | 41282      | 12/897224          | US | REPLAYING CAPTURED NETWORK TRAFFIC                                                                                                   |
| 82263146     | Granted     | 8667334       | 8/27/2010   | 3/4/2014   | 12/870418          | US | PROBLEM ISOLATION IN A VIRTUAL ENVIRONMENT                                                                                           |
| 82264082     | Published   |               | 9/15/2010   |            | 12/882239          | US | Analyzing Network Activity By Presenting Topology Information With Application Traffic Quantity                                      |
| 82275635     | Published   |               | 1/27/2011   |            | 13/015356          | US | IDENTIFYING REMOTE MACHINE OPERATING SYSTEM                                                                                          |
| 82663334     | Granted     | 8402177       | 6/29/2011   | 3/19/2013  | 13/171782          | US | INFERRING HOST STORAGE TOPOLOGY                                                                                                      |
| 82848987     | Granted     | 9015372       | 3/30/2012   | 4/21/2015  | 13/436169          | US | MANAGING DATA PATHS BETWEEN COMPUTER APPLICATIONS AND DATA STORAGE DEVICES                                                           |
| 82852880     | Published   |               | 10/26/2009  |            | 13/384739          | US | Automatic Redundant Logical Connections                                                                                              |
| 83098424     | Granted     | 8929225       | 12/7/2012   | 1/6/2015   | 13/707696          | US | CUSTOMER EDGE DEVICE PROBLEM IDENTIFICATION                                                                                          |
| 83098567     | Published   |               | 2/28/2013   |            | 13/780751          | US | DATA PARTIONING BASED ON END USER BEHAVIOR                                                                                           |
| 83098610     | Published   |               | 12/6/2012   |            | 13/700647          | US | RANKING AND SCHEDULING OF MONITORING TASKS                                                                                           |
| 83138146     | Granted     | 9087089       | 6/9/2010    | 7/21/2015  | 13/700620          | US | DETERMINING SIMILARITY SCORES OF ANOMALIES                                                                                           |
| 83170718     | Published   |               | 6/29/2012   |            | 13/813646          | US | RULE-BASED AUTOMATED TEST DATA GENERATION                                                                                            |
| 83184701     | Granted     | 9015474       | 7/30/2010   | 4/21/2015  | 13/812590          | US | SYSTEMS AND METHODS FOR CREDENTIALING                                                                                                |
| 83209089     | Published   |               | 4/30/2013   |            | 13/873790          | US | STOCHASTIC BASED DETERMINATION                                                                                                       |
| 83209553     | Published   |               | 12/20/2010  |            | 13/884570          | US | METHOD OF PROVISIONING ADDITIONAL STORAGE TO COMPUTER APPLICATIONS                                                                   |
| 83768667     | Published   |               | 12/5/2013   |            | 14/098188          | US | IDENTIFYING A COMMON ACTION FLOW                                                                                                     |
| 83789795     | Published   |               | 7/29/2011   |            | 14/234640          | US | MIGRATING VIRTUAL MACHINES                                                                                                           |
| 83822590     | Application |               | 4/30/2014   |            | 14/266336          | US | DATA STORE QUERY PREDICTION                                                                                                          |

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| 84031420     | Application |               | 11/3/2014   |            | 14/531029          | US | USER ACTION DURATION                                                                                                                                |
| 84117623     | Published   |               | 6/29/2012   |            | 14/406609          | US | PERSONALIZING SHARED COLLABORATION CONTENT                                                                                                          |
| 84295410     | Application |               | 1/3/2013    |            | 14/655772          | US | IDENTIFYING AN ANALYSIS REPORTING MESSAGE IN NETWORK TRAFFIC                                                                                        |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82098767     | Granted     | 8069075       | 3/5/2003    | 11/29/2011 | 10/378872          | US | Method And System For Evaluating Performance Of A Website Using A Customer Segment Agent To Interact With The Website According To A Behavior Model |
| 82232681     | Granted     | 6549944       | 7/6/2000    | 4/15/2003  | 09/610909          | US | USE OF SERVER ACCESS LOGS TO GENERATE SCRIPTS AND SCENARIOS FOR EXERCISING AND EVALUATING PERFORMANCE OF WEB SITES                                  |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82233179     | Granted     | 6560564       | 7/8/2002    | 5/6/2003   | 10/192816          | US | SYSTEM AND METHODS FOR LOAD TESTING A TRANSACTIONAL SERVER OVER A WIDE AREA NETWORK                                                                 |
| 82233239     | Granted     | 6694288       | 8/6/2002    | 2/17/2004  | 10/214421          | US | SYSTEM AND METHOD FOR AUTOMATED ANALYSIS OF LOAD TESTING RESULTS                                                                                    |
| 82233245     | Granted     | 6898556       | 9/26/2003   | 5/24/2005  | 10/672445          | US | SOFTWARE SYSTEM AND METHODS FOR ANALYZING THE PERFORMANCE OF A SERVER                                                                               |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82236488     | Granted     | 8266599       | 9/30/2008   | 9/11/2012  | 12/241730          | US | Output From Changed Object On Application                                                                                                           |
| 82245605     | Granted     | 8516451       | 9/30/2008   | 8/20/2013  | 12/241622          | US | System And Method For Creating Virtual Callback Objects                                                                                             |
| 82247603     | Published   |               | 10/24/2008  |            | 12/258044          | US | Software Test Management System And Method With Facilitated Reuse Of Test Components                                                                |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82260023     | Granted     | 8756571       | 5/7/2010    | 6/17/2014  | 12/776043          | US | NATURAL LANGUAGE TEXT INSTRUCTIONS                                                                                                                  |
| 82264334     | Granted     | 9043440       | 12/16/2010  | 5/26/2015  | 12/970764          | US | AUTOMATIC WSDL DOWNLOAD OF CLIENT EMULATION FOR A TESTING TOOL                                                                                      |
| 82275632     | Granted     | 8819631       | 1/13/2011   | 8/26/2014  | 13/006204          | US | SYSTEM AND METHOD FOR SELF DEPENDENT WEB AUTOMATION                                                                                                 |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 82749033     | Granted     | 8745600       | 7/21/2011   | 6/3/2014   | 13/187898          | US | INSERTING TEST SCRIPTS                                                                                                                              |
| 82964550     | Published   |               | 4/30/2012   |            | 13/459356          | US | DYNAMIC DATA FOR PRODUCING A SCRIPT                                                                                                                 |
| 82964819     | Granted     | 8850407       | 5/23/2012   | 9/30/2014  | 13/478875          | US | TEST SCRIPT GENERATION                                                                                                                              |
| 82964922     | Published   |               | 5/30/2012   |            | 13/483755          | US | LOAD TEST CAPACITY PLANNING                                                                                                                         |
| 82976953     | Granted     | 9026853       | 7/31/2012   | 5/5/2015   | 13/563635          | US | ENHANCING TEST SCRIPTS                                                                                                                              |
| 83185162     | Published   |               | 8/17/2010   |            | 13/812600          | US | PROVIDING AUTOMATION CODE CONTAINING A REPRESENTATION OF ALTERNATIVE INTERPRETATIONS OF A USER ACTION                                               |
|              |             |               |             |            |                    |    |                                                                                                                                                     |
| 84030845     | Application |               | 11/26/2014  |            | 14/554418          | US | RESOLUTION OF DATA INCONSISTENCIES                                                                                                                  |
| 84073063     | Published   |               | 7/31/2012   |            | 14/397213          | US | CONSTRUCTING TEST-CENTRIC MODEL OF APPLICATION                                                                                                      |
| 84124069     | Published   |               | 12/30/2014  |            | 14/585805          | US | IDENTIFYING DYNAMIC CONTENT IN RESPONSES                                                                                                            |
| 84139618     | Application |               | 10/31/2012  |            | 14/415632          | US | EXECUTABLE SOFTWARE SPECIFICATION GENERATION                                                                                                        |

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| 90037867     | To Be Filed |               |             |            |                    | US | End-to-end solution that includes novel real user coverage and usage quality scores, automatic prioritized recommendations to enhance the tests, development plan, with an easy to understand visualization based on production sessions. |
| 81977459     | Granted     | 7181618       | 1/12/2001   | 2/20/2007  | 09/760404          | US | System And Method For Recovering A Security Profile Of Computer System                                                                                                                                                                    |
| 82061615     | Granted     | 7340601       | 12/7/2000   | 3/4/2008   | 09/732948          | US | Electronic Certificate                                                                                                                                                                                                                    |
| 82193282     | Granted     | 7512965       | 7/7/2000    | 3/31/2009  | 09/611463          | US | Computer System Security Service                                                                                                                                                                                                          |
| 82193285     | Granted     | 7757271       | 1/15/2008   | 7/13/2010  | 12/014612          | US | Computer System Security Service                                                                                                                                                                                                          |
| 82244351     | Granted     | 7765597       | 8/1/2006    | 7/27/2010  | 11/461766          | US | Integrated Crawling And Auditing Of Web Applications And Web Content                                                                                                                                                                      |
| 82581651     | Published   |               | 3/8/2011    |            | 13/042649          | US | CONTROLLING ACCESS TO A COMPUTER SYSTEM                                                                                                                                                                                                   |
| 82842034     | Granted     | 8739280       | 9/29/2011   | 5/27/2014  | 13/248948          | US | CONTEXT-SENSITIVE TAINT ANALYSIS                                                                                                                                                                                                          |
| 83680346     | Allowed     |               | 9/30/2013   |            | 14/041365          | US | DETERMINE ANOMALIES IN WEB APPLICATION CODE BASED ON AUTHORIZATION CHECKS                                                                                                                                                                 |
| 84079538     | Application |               | 7/26/2012   |            | 14/397988          | US | APPLICATION SECURITY TESTING                                                                                                                                                                                                              |
| 84182220     | Application |               | 9/28/2012   |            | 14/431996          | US | APPLICATION SECURITY TESTING                                                                                                                                                                                                              |
| 81967409     | Granted     | 7702687       | 6/1/2005    | 4/20/2010  | 11/141839          | US | Method And System Of Typing Resources In A Distributed System                                                                                                                                                                             |
| 82102256     | Granted     | 8132124       | 3/13/2003   | 3/6/2012   | 10/387614          | US | Method And System For Representing Web Service Activity Through A User Interface                                                                                                                                                          |
| 82234736     | Granted     | 7925636       | 6/8/2007    | 4/12/2011  | 11/808318          | US | Repository System And Method                                                                                                                                                                                                              |
| 82234739     | Granted     | 7765188       | 6/8/2007    | 7/27/2010  | 11/808319          | US | Taxonomy Editor                                                                                                                                                                                                                           |
| 82242857     | Published   |               | 10/30/2008  |            | 12/261989          | US | SEPARATION OF CONCERNS BETWEEN INFORMATION TECHNOLOGY SERVICES MODELS                                                                                                                                                                     |
| 82249349     | Allowed     |               | 2/11/2009   |            | 12/369203          | US | Creating Searchable Revisions Of A Resource In A Repository                                                                                                                                                                               |
| 82250906     | Allowed     |               | 7/31/2009   |            | 12/533660          | US | System And Method For Deploying Software Into A Computing Environment                                                                                                                                                                     |
| 82257404     | Published   |               | 5/16/2008   |            | 12/122425          | US | SYSTEM AND METHOD FOR THE ELECTRONIC DESIGN OF COLLABORATIVE AND VALIDATED ARCHITECTURES                                                                                                                                                  |
| 82262333     | Granted     | 9037843       | 3/10/2010   | 5/19/2015  | 12/721133          | US | MANAGING A TARGET COMPUTING DEVICE (amended)                                                                                                                                                                                              |
| 82263833     | Granted     | 8458699       | 11/18/2010  | 6/4/2013   | 12/949476          | US | METHODS, SYSTEMS, AND APPARATUS TO PRIORITIZE COMPUTING DEVICES FOR VIRTUALIZATION                                                                                                                                                        |
| 82581296     | Granted     | 8713183       | 3/27/2011   | 4/29/2014  | 13/072723          | US | RESOURCE COMPATIBILITY FOR DATA CENTERS                                                                                                                                                                                                   |
| 82852316     | Granted     | 8595168       | 7/28/2009   | 41604      | 13/258710          | US | INSTANTIATING AN INFORMATION TECHNOLOGY SERVICE IN LIGHT OF MAINTENANCE REQUIREMENTS                                                                                                                                                      |

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| 83138527     | Published    |               | 1/31/2013   |            | 13/756193          | US | DYNAMIC PROFITABILITY MANAGEMENT FOR CLOUD SERVICE PROVIDERS                                                                                                    |
| 83140877     | Granted      | 9110895       | 6/30/2010   | 8/18/2015  | 13/702863          | US | SYSTEM AND METHOD FOR A SERIALIZED DATA SERVICE                                                                                                                 |
| 83204787     | Published    |               | 4/25/2013   |            | 13/870543          | US | MULTILEVEL LOAD BALANCING                                                                                                                                       |
| 83991738     | Published    |               | 1/29/2012   |            | 14/374486          | US | BEST-DEAL LIST GENERATION                                                                                                                                       |
| 84099804     | Application  |               | 11/3/2014   |            | 62/074310          | US | MARKETPLACE FOR CLOUD SERVICE PROVIDERS                                                                                                                         |
| 84099810     | Application  |               | 11/3/2014   |            | 62/074316          | US | EVOLVING OPENSTACK SERVICE MODEL AND POLICY-BASED FULFILLMENT FOR CLOUD BRIDGE                                                                                  |
| 84118582     | Published    |               | 7/3/2012    |            | 14/406711          | US | MANAGING A CLOUD SERVICE                                                                                                                                        |
| 84123202     | Published    |               | 7/31/2012   |            | 14/413563          | US | ABSTRACTION MODELS FOR MONITORING OF CLOUD RESOURCES                                                                                                            |
| 84198287     | Application  |               | 11/23/2012  |            | 14/429552          | US | Dynamic Management Of A Cloud Computing Infrastructure                                                                                                          |
| 84262904     | Application  |               | 8/5/2015    |            | 14/818834          | US | PROVIDING COMPLIANCE/ MONITORING SERVICE BASED ON CONTENT OF A SERVICE CONTROLLER                                                                               |
| 84273489     | Application  |               | 6/11/2015   |            | 14/736801          | US | Automated Cloud Set Up                                                                                                                                          |
| 90031040     | Application  |               | 3/15/2013   |            | 14/775937          | US | Sending Encrypted Data to a Service Provider                                                                                                                    |
| 90035245     | Acknowledged |               |             |            |                    | US | Improve speed, usability, and correctness during installation of the application (and in the future during the application usage) by providing User Assistance. |
| 81995123     | Granted      | 6961716       | 7/31/2001   | 11/1/2005  | 09/919148          | US | Network Usage Analysis System And Method For Determining Excess Usage                                                                                           |
| 82046324     | Granted      | 6373932       | 5/3/1999    | 4/16/2002  | 09/303882          | US | Configuration Tracking System                                                                                                                                   |
| 82062743     | Granted      | 6988126       | 10/16/2001  | 1/17/2006  | 09/977494          | US | CONTACT CENTER SYSTEM AND METHOD FOR SPECIFYING DIFFERENT SERVICE SPECIFIC BEHAVIOURS AND OFFERING RANGE OF CORRESPONDING CUSTOMER SERVICES                     |
| 82070483     | Granted      | 6879681       | 7/3/2002    | 4/12/2005  | 10/189353          | US | MULTI-SERVICE TELECOMMUNICATION SYSTEM AND ASSOCIATED METHODS                                                                                                   |
| 82070603     | Granted      | 8391462       | 6/5/2001    | 3/5/2013   | 09/875462          | US | A Communication Platform For Providing Computer Telephony Integration Services To Remote Subscribers, And Associated Method                                     |
| 82116932     | Granted      | 6173174       | 11/23/1999  | 1/9/2001   | 09/447516          | US | METHOD AND APPARATUS FOR AUTOMATED SSD UPDATES ON AN A-KEY ENTRY IN A MOBILE TELEPHONE SYSTEM                                                                   |
| 82121678     | Granted      | 7881308       | 6/18/2002   | 2/1/2011   | 10/174276          | US | METHOD AND SYSTEM FOR PROVIDING TELECOMMUNICATION SUBSCRIBER SERVICES WITHOUT PROVISIONING OR MAINTENANCE                                                       |
| 82164878     | Granted      | 5790800       | 10/13/1995  | 8/4/1998   | 08/543096          | US | CLIENT APPLICATION PROGRAM MOBILIZER                                                                                                                            |
| 82168934     | Granted      | 7130615       | 9/10/2003   | 10/31/2006 | 10/660424          | US | Software Authentication For Mobile Communication Devices                                                                                                        |
| 82170812     | Granted      | 7936738       | 7/6/2004    | 5/3/2011   | 10/536625          | US | Fault Tolerant Systems                                                                                                                                          |

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| 82171184     | Granted   | 7257216       | 11/3/2003   | 39308      | 10/7/00216         | US | Selective Message Discard                                                                                                                             |
| 82176116     | Granted   | 8589156       | 7/12/2004   | 11/19/2013 | 10/888593          | US | Allocation Of Speech Recognition Tasks And Combination Of Results Thereof                                                                             |
| 82186727     | Granted   | 7860095       | 7/12/2004   | 12/28/2010 | 10/577844          | US | Method And Apparatus For Load-balancing                                                                                                               |
| 82195973     | Granted   | 7519051       | 7/12/2005   | 4/14/2009  | 11/181031          | US | Methods And Related Apparatus For Operating A Gateway To Act As A Conduit For A Structured Transaction                                                |
| 82197845     | Granted   | 8934927       | 10/14/2005  | 1/13/2015  | 11/250926          | US | METHOD AND APPARATUS FOR ROUTING SHORT MESSAGES IN MOBILE TELEPHONE NETWORKS                                                                          |
| 82202087     | Granted   | 8184128       | 10/27/2004  | 5/22/2012  | 11/718228          | US | Data Distribution System, And Method Therefor                                                                                                         |
| 82211891     | Granted   | 7529813       | 4/14/2005   | 5/5/2009   | 11/107140          | US | Multimedia Transfer For Wireless Networks                                                                                                             |
| 82217255     | Granted   | 8269815       | 9/22/2005   | 9/18/2012  | 12/067248          | US | Dynamic Image Distribution Device And Method Thereof                                                                                                  |
| 82219757     | Granted   | 8243718       | 1/3/2007    | 8/14/2012  | 12/087781          | US | Communications System And Gateway                                                                                                                     |
| 82227557     | Granted   | 8223949       | 3/27/2008   | 7/17/2012  | 12/056284          | US | A Method, Apparatus And Software For Providing Communications Between A Packet Switched Network And A Public Switched Telephone Network               |
| 82249034     | Published |               | 4/2/2010    |            | 12/753707          | US | Method And Apparatus For Network Communications                                                                                                       |
| 82257902     | Granted   | 8170528       | 10/9/2009   | 5/1/2012   | 12/576728          | US | NETWORK ACCESS CONTROL                                                                                                                                |
| 82274318     | Granted   | 7330453       | 5/31/2003   | 2/12/2008  | 10/448958          | US | SYSTEM AND METHOD FOR INTEGRATING CALL CONTROL AND DATA NETWORK ACCESS COMPONENTS                                                                     |
| 82274321     | Granted   | 7969956       | 12/17/2007  | 6/28/2011  | 11/957918          | US | SYSTEM AND METHOD FOR INTEGRATING CALL CONTROL AND DATA NETWORK ACCESS COMPONENTS                                                                     |
| 84077689     | Published |               | 7/31/2012   |            | 14/396139          | US | GENERATING SERVICE REQUEST MESSAGE TO OBTAIN WIRELESS SERVICES USING A MINIMAL SET OF SERVICES THAT ARE DESIGNATED BY DEFAULT FOR A ROAMING CONDITION |
| 81970652     | Granted   | 6889199       | 11/30/2000  | 5/3/2005   | 09/728135          | US | Method And Apparatus For Encoding And Generating Transaction-Based Stimulus For Simulation Of VLSI Circuits                                           |
| 81974957     | Granted   | 7058853       | 6/11/2001   | 6/6/2006   | 09/879404          | US | Highly Available Transaction Processing                                                                                                               |
| 82014917     | Granted   | 5758077       | 8/2/1996    | 5/26/1998  | 08/691994          | US | Service-Centric Monitoring System And Method For Monitoring Of Distributed Services In A Computing Network                                            |
| 82106564     | Granted   | 8316361       | 1/9/2003    | 41233      | 10/340236          | US | Method Of Enabling A User To Update One Or More Low-level Resources Of A Computer System In A User-friendly Manner                                    |
| 82189853     | Granted   | 7586946       | 10/31/2005  | 9/8/2009   | 11/263502          | US | Method And Apparatus For Automatically Evaluating And Allocating Resources In A Cell Based System                                                     |
| 82196405     | Granted   | 7653934       | 7/14/2004   | 1/26/2010  | 10/892077          | US | Role-based Access Control                                                                                                                             |
| 82257968     | Granted   | 8108712       | 10/30/2009  | 40939      | 12/588857          | US | METHOD AND APPARATUS FOR REMOVING A COMPUTER FROM A COMPUTER CLUSTER OBSERVING FAILURE                                                                |
| 83213194     | Published |               | 10/5/2010   |            | 13/822606          | US | ACYCLIC GRAPH NAVIGATOR                                                                                                                               |
| 81956792     | Granted   | 6035399       | 4/7/1995    | 3/7/2000   | 08/422206          | US | Checkpoint Object                                                                                                                                     |

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| 81983012     | Granted | 6976270       | 5/8/2001    | 12/13/2005 | 09/850945          | US | Process And Component For Inquiring About Security Relationships                                                                                    |
| 81984575     | Granted | 6871223       | 4/13/2001   | 3/22/2005  | 09/835212          | US | System And Method For Agent Reporting In To Server                                                                                                  |
| 81987200     | Granted | 6807627       | 1/19/2001   | 10/19/2004 | 09/765930          | US | Preserving The Content Of A First Register Without Affecting The Content Of A Second Register                                                       |
| 81987509     | Granted | 6889244       | 10/31/2000  | 5/3/2005   | 09/703427          | US | Method And Apparatus For Passing Messages Using A Fast-Tolerant Storage System                                                                      |
| 81988511     | Granted | 6859892       | 4/25/2001   | 2/22/2005  | 09/843265          | US | Synchronous Breakpoint System And Method                                                                                                            |
| 81992945     | Granted | 7577998       | 11/16/2001  | 8/18/2009  | 09/987911          | US | Method Of Detecting Critical File Changes                                                                                                           |
| 81998681     | Granted | 7134050       | 8/15/2003   | 11/7/2006  | 10/641985          | US | Method And System For Containing Software Faults                                                                                                    |
| 81998687     | Granted | 7058786       | 1/17/2002   | 6/6/2006   | 10/051773          | US | Operating System Data Communication Method And System                                                                                               |
| 82002617     | Granted | 6996728       | 4/26/2002   | 2/7/2006   | 10/133730          | US | MANAGING POWER CONSUMPTION BASED OF UTILIZATION STATISTICS                                                                                          |
| 82004615     | Granted | 6766497       | 1/25/2002   | 7/20/2004  | 10/057245          | US | Method And System For Reproduction In A Genetic Optimization Process                                                                                |
| 82004738     | Granted | 7028302       | 4/24/2002   | 4/11/2006  | 10/131669          | US | System And Method For Automatically Tuning A Multiprocessor Computer System                                                                         |
| 82022912     | Granted | 6119079       | 4/24/1997   | 9/12/2000  | 08/842460          | US | Method And Structure For Tokenized Message Logging System                                                                                           |
| 82028156     | Granted | 6026424       | 2/23/1998   | 2/15/2000  | 09/027691          | US | METHOD AND APPARATUS FOR SWITCHING LONG DURATION TASKS FROM SYNCHRONOUS TO ASYNCHRONOUS EXECUTION AND FOR REPORTING TASK RESULTS                    |
| 82029653     | Granted | 6199202       | 1/6/1998    | 3/6/2001   | 09/003573          | US | METHOD AND APPARATUS FOR THE INTER-OPERATION OF DIFFERING ARCHITECTURAL AND RUN TIME CONVENTIONS                                                    |
| 82051502     | Granted | 6802002       | 1/14/2000   | 10/5/2004  | 09/483189          | US | Method And Apparatus For Providing Field Confidentiality In Digital Certificates                                                                    |
| 82088777     | Granted | 6804691       | 3/21/2002   | 10/12/2004 | 10/104751          | US | METHOD FOR OPTIMIZATION OF MEMORY USAGE FOR A COMPUTER PROGRAM                                                                                      |
| 82090025     | Granted | 7185271       | 8/20/2002   | 2/27/2007  | 10/225099          | US | METHODS AND SYSTEMS FOR IMPLEMENTING AUTO-COMPLETE IN A WEB PAGE                                                                                    |
| 82090583     | Granted | 7996846       | 11/27/2006  | 8/9/2011   | 11/604248          | US | ALLOCATION OF SYSTEM RESOURCES AMONG APPLICATIONS USING PREDEFINED ENTITLEMENT VALUES AND WEIGHT ASSOCIATED WITH EACH OF THE APPLICATIONS (Amended) |
| 82093517     | Granted | 8332694       | 9/24/2002   | 12/11/2012 | 10/254556          | US | A Method For Notification Of An Error In Data Exchanged Between A Client And A Server                                                               |

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| 82097576     | Granted | 7076488       | 1/29/2003   | 7/11/2006  | 10/354488          | US | XML-LDAP Adapters And Methods Therefor                                                                                                       |
| 82098323     | Granted | 7502826       | 3/27/2003   | 3/10/2009  | 10/401233          | US | Atomic Operations                                                                                                                            |
| 82099385     | Granted | 7373497       | 1/23/2003   | 5/13/2008  | 10/351128          | US | METHODS AND APPARATUS FOR RAPIDLY ACTIVATING PREVIOUSLY INACTIVE COMPONENTS IN A COMPUTER SYSTEM                                             |
| 82104572     | Granted | 7313102       | 3/17/2003   | 12/25/2007 | 10/390492          | US | System And Method For Subnet Configuration And Selection                                                                                     |
| 82110560     | Granted | 6493343       | 12/30/1998  | 12/10/2002 | 09/224114          | US | SYSTEM AND METHOD FOR IMPLEMENTING MULTI-PATH AND DATA TRANSFERS IN A SYSTEM AREA NETWORK                                                    |
| 82110563     | Granted | 6545981       | 12/30/1998  | 4/8/2003   | 09/224115          | US | SYSTEM AND METHOD FOR IMPLEMENTING ERROR DETECTION AND RECOVERY IN A SYSTEM AREA NETWORK                                                     |
| 82110566     | Granted | 6163834       | 12/30/1998  | 12/19/2000 | 09/228069          | US | TWO LEVEL ADDRESS TRANSLATION AND MEMORY REGISTRATION SYSTEM AND METHOD                                                                      |
| 82110815     | Granted | 6121737       | 6/4/1999    | 9/19/2000  | 09/326119          | US | CEILING MOUNTED PROCESSOR SYSTEM                                                                                                             |
| 82110872     | Granted | 6219235       | 5/19/1999   | 4/17/2001  | 09/314610          | US | ELECTRONIC ASSEMBLY FOR STANDARD RACK ENCLOSURES                                                                                             |
| 82110878     | Granted | 7468982       | 11/7/2002   | 12/23/2008 | 10/291865          | US | Method And Apparatus For Cluster Interconnection Using Multi-port Nodes And Multiple Routing Fabrics                                         |
| 82116557     | Granted | 5805920       | 11/13/1995  | 9/8/1998   | 08/556618          | US | DIRECT BULK DATA TRANSFERS                                                                                                                   |
| 82119800     | Granted | 7343602       | 12/18/2001  | 3/11/2008  | 10/029699          | US | SOFTWARE CONTROLLED PRE-EXECUTION IN A MULTITHREADED PROCESSOR                                                                               |
| 82128980     | Granted | 5974517       | 9/17/1996   | 10/26/1999 | 08/710360          | US | METHOD AND SYSTEM FOR MOUNTING A SYSTEM PARTITION AS A LOGICAL DRIVE WHILE AN OPERATING SYSTEM IS OPERATIONAL BY MODIFYING A PARTITION TABLE |
| 82131599     | Granted | 7039739       | 3/14/2002   | 5/2/2006   | 10/097472          | US | METHOD AND APPARATUS FOR PROVIDING SEAMLESS HOOKING AND INTERCEPTING OF SELECTED KERNEL AND HAL EXPORTED ENTRY POINTS                        |
| 82136345     | Granted | 6804766       | 11/12/1997  | 10/12/2004 | 08/968244          | US | METHOD FOR MANAGING PAGES OF A DESIGNATED MEMORY OBJECT ACCORDING TO SELECTED MEMORY MANAGEMENT POLICIES                                     |
| 82136348     | Granted | 7337296       | 10/8/2004   | 2/26/2008  | 10/962053          | US | Managing Physical Memory In A Virtual Memory Computer                                                                                        |
| 82169747     | Granted | 7509657       | 10/28/2003  | 3/24/2009  | 10/695210          | US | Application Programming Interface For A Virtual Switch                                                                                       |
| 82171556     | Granted | 8042187       | 8/25/2003   | 10/18/2011 | 10/648531          | US | A Security Indication Spanning Tree System And Method                                                                                        |
| 82171562     | Granted | 7519996       | 8/25/2003   | 4/14/2009  | 10/648555          | US | SECURITY INTRUSION MITIGATION SYSTEM AND METHOD                                                                                              |
| 82177862     | Granted | 7302561       | 9/25/2003   | 11/27/2007 | 10/669207          | US | Apparatus And Method For User-defined Tunables                                                                                               |
| 82177865     | Granted | 7596688       | 10/31/2007  | 9/29/2009  | 11/979257          | US | Apparatus And Method For User-defined Tunables                                                                                               |
| 82179365     | Granted | 7296146       | 1/12/2004   | 11/13/2007 | 10/756597          | US | Security Measures In A Partitionable Computing System                                                                                        |
| 82179671     | Granted | 7426731       | 3/22/2004   | 9/16/2008  | 10/805934          | US | Determining Processor Usage By A Thread                                                                                                      |
| 82180547     | Granted | 7672222       | 1/12/2004   | 3/2/2010   | 10/756685          | US | Link Failures                                                                                                                                |

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| 82182356     | Granted   | 7650275       | 1/20/2005   | 1/19/2010  | 11/039621          | US | External Emulation Hardware                                                                                                                      |
| 82182986     | Granted   | 7346802       | 1/30/2004   | 3/18/2008  | 10/769371          | US | Routing Communications To A Storage Area Network                                                                                                 |
| 82184918     | Granted   | 8316048       | 8/17/2004   | 11/20/2012 | 10/920915          | US | Method And Apparatus For Managing A Data Structure                                                                                               |
| 82185980     | Granted   | 7426656       | 1/25/2005   | 9/16/2008  | 11/042548          | US | Multi-processor Access                                                                                                                           |
| 82186979     | Granted   | 7562356       | 9/22/2004   | 7/14/2009  | 10/947676          | US | METHOD AND SYSTEM EXECUTING USER PROGRAMS ON NON-DETERMINISTIC PROCESSORS                                                                        |
| 82187288     | Granted   | 8407396       | 7/30/2004   | 3/26/2013  | 10/903986          | US | AUTOMATICALLY RESOLVING PATCH DEPENDENCIES FOR A PATCH BUNDLE                                                                                    |
| 82188044     | Granted   | 7533230       | 10/13/2004  | 5/12/2009  | 10/964835          | US | Providing Block Data Access For An Operating System Using Solid-State Memory                                                                     |
| 82193720     | Granted   | 7343370       | 3/7/2005    | 3/11/2008  | 11/074343          | US | Transparent Migration Of Files Among Various Types Of Storage Volumes Based On File Access Properties                                            |
| 82194287     | Granted   | 7353375       | 10/7/2004   | 4/1/2008   | 10/960529          | US | Plan Generation In Database Query Optimizers Through Specification Of Plan Patterns                                                              |
| 82199339     | Granted   | 7698510       | 6/22/2005   | 4/13/2010  | 11/159979          | US | Method And Apparatus For Managing Processor Availability Using A Microcode Patch                                                                 |
| 82199651     | Published |               | 2/23/2005   |            | 11/884790          | US | Systems And Methods For Identifying And Registering A Range Of Virtual Memory                                                                    |
| 82200029     | Granted   | 7325107       | 2/18/2005   | 1/29/2008  | 11/061391          | US | A Method And System For Managing A Common Resource In A Computing System                                                                         |
| 82201091     | Granted   | 7328331       | 1/25/2005   | 2/5/2008   | 11/042427          | US | Implementing Memory Evacuation Using Copy-on-write                                                                                               |
| 82201589     | Granted   | 8271550       | 10/27/2006  | 41170      | 11/553993          | US | Method And System Of Aligning Execution Point Of Duplicate Copies Of A User Program By Copying Memory Stores                                     |
| 82204085     | Granted   | 8018469       | 10/27/2005  | 40799      | 11/260919          | US | Memory Piece Categorization                                                                                                                      |
|              |           |               |             |            |                    |    | System, Device, Method And Utility To Convert Images Retrieved From A Device To A Format Supported By A Device Management Tool                   |
| 82204526     | Granted   | 8108871       | 1/13/2005   | 1/31/2012  | 11/034685          | US | Method For Controlling Resource Utilization And Computer System                                                                                  |
| 82204769     | Granted   | 8144618       | 1/31/2005   | 3/27/2012  | 11/048311          | US | Method And Apparatus For Automatic Verification Of A Zone Configuration And Network Access Control Construct For A Plurality Of Network Switches |
| 82205024     | Granted   | 7640332       | 12/20/2007  | 40176      | 12/003182          | US | System And Method For Hot Deployment/Redeployment In Grid Computing Environment                                                                  |
| 82205459     | Granted   | 8561050       | 10/18/2006  | 10/15/2013 | 11/582345          | US | Method And System For Updating An Application                                                                                                    |
| 82209764     | Granted   | 8082547       | 10/31/2006  | 40897      | 11/590584          | US | Reallocating Hardware Resources Among Workloads In Accordance With License Rights                                                                |

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| 82209767     | Granted     | 8650296       | 10/31/2006  | 41681      | 11/590334          | US | Workload Reallocation Involving Inter-server Transfers Of Software License Rights And Intra-server Transfer Of Hardware Resources |
| 82210268     | Granted     | 7594223       | 6/27/2005   | 9/22/2009  | 11/168111          | US | Straight-line Post-increment Optimization For Memory Access Instructions                                                          |
| 82210580     | Granted     | 7434040       | 7/25/2005   | 10/7/2008  | 11/188614          | US | Copying Of Unaligned Data In A Pipelined Operation                                                                                |
| 82210700     | Granted     | 8266616       | 5/11/2006   | 41163      | 11/433663          | US | Computer System Provisioning Using Templates                                                                                      |
| 82212575     | Granted     | 8924590       | 2/14/2006   | 12/30/2014 | 11/353548          | US | System And Method For Communicating In A Networked System                                                                         |
| 82214447     | Granted     | 8453132       | 6/20/2007   | 41422      | 11/812639          | US | SYSTEM AND METHOD FOR RECOMPILING CODE BASED ON LOCALITY DOMAIN AND THREAD AFFINITY IN NUMA COMPUTER SYSTEMS                      |
| 82215320     | Granted     | 7788513       | 8/29/2006   | 40421      | 11/511605          | US | Method Of Reducing Power Consumption Of A Computing System By Evacuating Selective Platform Memory Components Thereof             |
| 82216013     | Granted     | 7657776       | 9/20/2006   | 40211      | 11/523892          | US | Containing Machine Check Events In A Virtual Partition                                                                            |
| 82216262     | Granted     | 8122264       | 4/22/2006   | 40960      | 11/408377          | US | Power-state Change As A Function Of Direction Of Right-to-use Status Change                                                       |
| 82217573     | Granted     | 8516218       | 10/30/2006  | 41506      | 11/590459          | US | PATTERN-BASED MAPPING FOR STORAGE SPACE MANAGEMENT                                                                                |
| 82218197     | Granted     | 8205190       | 1/29/2008   | 6/19/2012  | 12/021998          | US | Data Processing System And Method                                                                                                 |
| 82218941     | Granted     | 8051417       | 1/30/2007   | 11/1/2011  | 11/700744          | US | TARGET THREAD SELECTION IN A MULTI-THREADED PROCESS                                                                               |
| 82219634     | Granted     | 7930486       | 4/30/2007   | 4/19/2011  | 11/799303          | US | CACHE CHUNKED LIST CONCRETE DATA TYPE                                                                                             |
| 82219691     | Granted     | 7895329       | 1/12/2006   | 2/22/2011  | 11/332035          | US | Protocol Flow Control                                                                                                             |
| 82219940     | Application |               | 1/31/2007   |            | 11/669708          | US | MULTI-VARIATE COMPUTER RESOURCE ALLOCATION                                                                                        |
| 82224686     | Granted     | 7895581       | 1/26/2007   | 2/22/2011  | 11/698526          | US | PROFILING COLLECTOR FOR COMPUTER SYSTEM                                                                                           |
| 82226375     | Granted     | 7937565       | 2/21/2008   | 5/3/2011   | 12/034741          | US | Method And System For Data Speculation On Multicore Systems                                                                       |
| 82227995     | Granted     | 7673082       | 5/29/2008   | 3/2/2010   | 12/129533          | US | Method And System To Determine Device Criticality For Hot-plugging In Computer Configurations                                     |
| 82235300     | Granted     | 8214452       | 7/30/2007   | 7/3/2012   | 11/830029          | US | Monitoring Of Windows On Computers                                                                                                |
| 82238798     | Granted     | 8209443       | 9/18/2008   | 6/26/2012  | 12/212851          | US | System And Method For Identifying Lost/state Hardware In A Computing System                                                       |
| 82239359     | Granted     | 8126015       | 6/13/2008   | 2/28/2012  | 12/138985          | US | Multi-Stream Communication Processing                                                                                             |
| 82240358     | Granted     | 7969894       | 6/19/2008   | 6/28/2011  | 12/141942          | US | System And Method For Dead Gateway Detection                                                                                      |
| 82243541     | Granted     | 8312515       | 12/15/2008  | 11/13/2012 | 12/334548          | US | Method Of Role Creation                                                                                                           |
| 82244600     | Granted     | 8180793       | 5/2/2009    | 5/15/2012  | 12/434623          | US | Access To Data Stored In A File System                                                                                            |
| 82244915     | Granted     | 8046608       | 8/6/2008    | 10/25/2011 | 12/186543          | US | Method And System For Managing Power Supply To At Least One Device                                                                |

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| 82245728     | Granted   | 8209413       | 10/31/2008  | 6/26/2012  | 12/263245          | US | EMERGENCY POWER SETTINGS FOR DATA-CENTER FACILITIES                                                                                                                                        |
| 82247786     | Granted   | 8051382       | 10/30/2008  | 11/1/2011  | 12/261542          | US | INFRASTRUCTURE EVENT                                                                                                                                                                       |
| 82247909     | Granted   | 8015423       | 10/30/2008  | 9/6/2011   | 12/261422          | US | DISPLAYING RATING INDICATIONS FOR DROP TARGETS IN RESPONSE TO USER DRAGGING OF MOBILE ICON                                                                                                 |
| 82247912     | Granted   | 8527988       | 7/31/2009   | 9/3/2013   | 12/533244          | US | Temporally Normalized Processor Utilization                                                                                                                                                |
| 82247915     | Granted   | 8209512       | 3/16/2009   | 6/26/2012  | 12/404935          | US | Proximity Mapping Of Virtual-machine Threads To Processor                                                                                                                                  |
| 82250969     | Granted   | 8769546       | 1/7/2010    | 7/1/2014   | 12/684009          | US | SELECTING A CELL THAT IS A PREFERRED CANDIDATE FOR EXECUTING A PROCESS                                                                                                                     |
| 82258148     | Granted   | 8549123       | 3/16/2009   | 41548      | 12/405175          | US | Busy-Wait Time For Threads                                                                                                                                                                 |
| 82259777     | Allowed   |               | 10/29/2009  |            | 12/588845          | US | LOGICAL SERVER MANAGEMENT                                                                                                                                                                  |
| 82262207     | Granted   | 8260763       | 1/15/2010   | 9/4/2012   | 12/688007          | US | SPECIFICATION AND CONFIGURATION OF MANAGEMENT INTENT                                                                                                                                       |
| 82653945     | Granted   | 8689227       | 1/30/2009   | 4/1/2014   | 13/145544          | US | MATCHING SERVICE ENTITIES WITH CANDIDATE RESOURCES                                                                                                                                         |
| 84020626     | Published |               | 7/30/2012   |            | 14/378430          | US | SYSTEM AND METHOD FOR INTEGRATING CAPACITY PLANNING AND WORKLOAD MANAGEMENT                                                                                                                |
| 84169087     | Published |               | 3/3/2015    |            | 14/637195          | US | VIRTUAL COMPUTING RESOURCE ORCHESTRATION                                                                                                                                                   |
| 81923015     | Granted   | 5960450       | 12/24/1992  | 9/28/1999  | 07/997620          | US | Method And System For Estimating Power Consumption For Aggregate System Workload                                                                                                           |
| 81968654     | Granted   | 6918052       | 11/3/2003   | 7/12/2005  | 10/700218          | US | System And Method For Accessing Data Between A Host Bus And System Memory Buses In Which Each System Memory Bus Has A Data Path Which Is Twice The Width Of The Data Path For The Host Bus |
| 81970904     | Granted   | 7312404       | 4/25/2006   | 39441      | 11/411748          | US | Managing Operations Of A Computer System Having A Plurality Of Partitions                                                                                                                  |
| 81993881     | Granted   | 7263620       | 8/7/2001    | 8/28/2007  | 09/923976          | US | Conductive Contamination Reliability Solution For Assembling Substrates                                                                                                                    |
| 82006175     | Granted   | 6912607       | 2/6/2002    | 6/28/2005  | 10/068029          | US | System And Method For Graceful Shutdown Of Host Processor Cards In A Server System                                                                                                         |
| 82019036     | Granted   | 5915114       | 2/14/1997   | 6/22/1999  | 08/799950          | US | Method And Apparatus For Ascertaining The Status Of Multiple Devices Simultaneously Over A Data Bus                                                                                        |
| 82021349     | Granted   | 5881316       | 11/12/1996  | 3/9/1999   | 08/748226          | US | Dynamic Trace Driven Object Code Optimizer                                                                                                                                                 |
| 82083905     | Granted   | 6934784       | 7/11/2002   | 8/23/2005  | 10/194788          | US | DYNAMIC ALLOCATION OF QUEUE SPACE USING COUNTERS                                                                                                                                           |
| 82084280     | Granted   | 7386712       | 2/17/2003   | 6/10/2008  | 10/369279          | US | SYSTEMS AND METHODS FOR MANAGING SYSTEM-MANAGEMENT-EVENT DATA                                                                                                                              |
| 82088402     | Granted   | 6832869       | 9/5/2002    | 12/21/2004 | 10/236491          | US | Firmware Developer User Interface With Break Command Polling                                                                                                                               |
|              |           |               |             |            |                    |    | HOOKEO SHAFT FASTENING DEVICE                                                                                                                                                              |

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| 82088651     | Granted | 7389435       | 8/12/2002   | 6/17/2008  | 10/216438 US       | US | System And Method For The Frequency Management Of Computer Systems To Allow Capacity On Demand                                                                      |
| 82089026     | Granted | 7406600       | 7/30/2003   | 7/29/2008  | 10/630144 US       | US | ERROR-DETECTABLE LICENSE KEY FRAGMENTATION TO FACILITATE ERRORLESS MANUAL ENTRY                                                                                     |
| 82090397     | Granted | 6948043       | 8/12/2002   | 9/20/2005  | 10/216435 US       | US | MANAGEMENT OF A MEMORY SUBSYSTEM                                                                                                                                    |
| 82090520     | Granted | 7065626       | 7/10/2002   | 6/20/2006  | 10/193774 US       | US | Method For Changing Computer System Memory Density                                                                                                                  |
| 82093328     | Granted | 7469370       | 12/23/2002  | 12/23/2008 | 10/328805 US       | US | Enabling Multiple Testing Devices                                                                                                                                   |
| 82093766     | Granted | 7025330       | 9/10/2002   | 4/11/2006  | 10/241304 US       | US | Ball Retainer Forward Locking Assembly                                                                                                                              |
| 82094147     | Granted | 7408788       | 3/5/2003    | 8/5/2008   | 10/379652 US       | US | Device And Method For Circuit Board Insertion And Removal                                                                                                           |
| 82100261     | Granted | 7363516       | 10/3/2003   | 4/22/2008  | 10/678657 US       | US | RACK EQUIPMENT MANAGEMENT SYSTEM AND METHOD                                                                                                                         |
| 82102010     | Granted | 7325846       | 5/7/2003    | 2/5/2008   | 10/431235 US       | US | Low Profile Mechanical Assist Hood Latch                                                                                                                            |
| 82102013     | Granted | 7614672       | 11/16/2007  | 11/10/2009 | 11/941832 US       | US | Low Profile Mechanical Assist Hood Latch                                                                                                                            |
| 82103693     | Granted | 7929310       | 9/20/2010   | 4/19/2011  | 12/886362 US       | US | Cell Board Interconnection Architecture                                                                                                                             |
| 82103948     | Granted | 6895353       | 6/4/2003    | 5/17/2005  | 10/453610 US       | US | Apparatus And Method For Monitoring High Impedance Failures In Chip Interconnects                                                                                   |
| 82122050     | Granted | 7023708       | 12/20/2002  | 4/4/2006   | 10/324944 US       | US | Multilevel Cable Support Arm And System And Method Incorporating Same                                                                                               |
| 82128167     | Granted | 6101322       | 6/5/1996    | 8/8/2000   | 08/658538 US       | US | REMOVAL AND INSERTION OF EXPANSION CARDS IN A COMPUTER SYSTEM                                                                                                       |
| 82132163     | Granted | 6084768       | 6/15/1998   | 7/4/2000   | 09/094817 US       | US | NON-OPERATIONAL SHOCK PROTECTION FOR DISK CARRIERS IN A HIGH DENSITY PACKAGE                                                                                        |
| 82132412     | Granted | 5966289       | 8/31/1998   | 10/12/1999 | 09/144249 US       | US | ELECTRONIC DEVICE SECUREMENT SYSTEM                                                                                                                                 |
| 82132598     | Granted | 5973934       | 6/18/1998   | 10/26/1999 | 09/099592 US       | US | PRINTED CIRCUIT BOARD LATCHING MECHANISM                                                                                                                            |
| 82133102     | Granted | 6210211       | 9/3/1999    | 4/3/2001   | 09/390257 US       | US | METHOD AND APPARATUS FOR RETAINING AN ELECTRICAL CONNECTOR                                                                                                          |
| 82134722     | Granted | 6226709       | 3/17/2000   | 5/1/2001   | 08/957688 US       | US | MEMORY REFRESH CONTROL SYSTEM                                                                                                                                       |
| 82134971     | Granted | 6185654       | 7/17/1998   | 2/6/2001   | 09/118985 US       | US | PHANTOM RESOURCE MEMORY ADDRESS MAPPING SYSTEM                                                                                                                      |
| 82135100     | Granted | 6134113       | 8/28/1997   | 10/17/2000 | 08/927101 US       | US | ENERGY ABSORBING VISCOELASTIC SPACER FOR REDUCING VIBRATION TO DISK DRIVES                                                                                          |
| 81928574     | Granted | 5640361       | 5/1/1996    | 6/17/1997  | 08/641659 US       | US | Memory Architecture                                                                                                                                                 |
| 82006988     | Granted | 6807603       | 2/22/2002   | 10/19/2004 | 10/080739 US       | US | System And Method For Input/output Module Virtualization And Memory Interleaving Using Cell Map                                                                     |
| 82014977     | Granted | 5761713       | 3/1/1996    | 6/2/1998   | 08/609821 US       | US | ADDRESS AGGREGATION SYSTEM AND METHOD FOR INCREASING THROUGHPUT OF TO A MULTI-BANKED DATA CACHE FROM A PROCESSOR BY CONCURRENTLY FORWARDING AN ADDRESS TO EACH BANK |
| 82018661     | Granted | 5787041       | 10/1/1996   | 7/28/1998  | 08/724204 US       | US | System And Method For Improving A Random Access Memory (RAM)                                                                                                        |

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| 82024841     | Granted | 6014732       | 10/22/1997  | 1/11/2000  | 08/955821          | US | Cache Memory With Reduced Access Time                                                                                                                                     |
| 82030028     | Granted | 6092127       | 5/15/1998   | 7/18/2000  | 09/080058          | US | DYNAMIC ALLOCATION AND REALLOCATION OF BUFFERS IN LINKS OF CHAINED DMA OPERATIONS BY RECEIVING NOTIFICATION OF BUFFER FULL AND MAINTAINING A QUEUE OF BUFFERS AVAILABLE   |
| 82031087     | Granted | 6647464       | 2/18/2000   | 11/11/2003 | 09/507546          | US | System And Method Utilizing Speculative Cache Access To Improved Performance                                                                                              |
| 82100072     | Granted | 7565504       | 3/27/2003   | 7/21/2009  | 10/401234          | US | QUEUE PAIR ACCESS TO A MEMORY WINDOW THROUGH VALIDATION OF A PROTECTION DOMAIN                                                                                            |
| 82117367     | Granted | 6651138       | 1/25/2001   | 11/18/2003 | 09/770101          | US | HOT-PLUG MEMORY CARTRIDGE POWER CONTROL LOGIC                                                                                                                             |
| 82117493     | Granted | 6715116       | 1/25/2001   | 3/30/2004  | 09/769958          | US | MEMORY DATA VERIFY OPERATION                                                                                                                                              |
| 82117496     | Granted | 6823424       | 9/28/2001   | 11/23/2004 | 09/966666          | US | REBUILD BUS UTILIZATION                                                                                                                                                   |
| 82117871     | Granted | 7370151       | 10/21/2003  | 5/6/2008   | 10/690137          | US | METHOD AND SYSTEM FOR ABSORBING DEFECTS IN HIGH PERFORMANCE MICROPROCESSOR WITH A LARGE N-WAY SET ASSOCIATIVE CACHE                                                       |
| 82119674     | Granted | 7620954       | 8/8/2001    | 11/17/2009 | 09/924934          | US | Mechanism For Handling Load Lock/store Conditional Primitives In Directory-based Distributed Shared Memory Multiprocessors                                                |
| 82120052     | Granted | 7155568       | 9/29/2001   | 12/26/2006 | 09/967610          | US | TRANSACTION GENERATOR FOR INITIALIZATION, REBUILD, AND VERIFY OF MEMORY                                                                                                   |
| 82121861     | Granted | 8078818       | 2/25/2005   | 12/13/2011 | 11/066038          | US | Method And System For Migrating Memory Segments                                                                                                                           |
| 82127669     | Granted | 5872941       | 6/5/1996    | 2/16/1999  | 08/559141          | US | PROVIDING DATA FROM A BRIDGE TO A REQUESTING DEVICE WHILE THE BRIDGE IS RECEIVING THE DATA                                                                                |
| 82131041     | Granted | 7055054       | 12/16/2002  | 5/30/2006  | 10/320188          | US | FAIL-OVER OF MULTIPLE MEMORY BLOCKS IN MULTIPLE MEMORY MODULES IN COMPUTER SYSTEM                                                                                         |
| 82132727     | Granted | 6487621       | 8/17/1999   | 11/26/2002 | 09/375454          | US | ARCHITECTURE, SYSTEM AND METHOD FOR ENSURING AN ORDERED TRANSACTION ON AT LEAST ONE OF A PLURALITY OF MULTI-PROCESSOR BUSES THAT EXPERIENCE A HIT-TO-MODIFIED SNOOP CYCLE |
| 82164377     | Granted | 6047357       | 1/27/1995   | 4/4/2000   | 08/379048          | US | HIGH SPEED METHOD FOR MAINTAINING CACHE COHERENCY IN A MULTI-LEVEL, SET ASSOCIATIVE CACHE HIERARCHY                                                                       |
| 82165562     | Granted | 6085276       | 10/24/1997  | 7/4/2000   | 08/957751          | US | A MULTI-PROCESSOR COMPUTER SYSTEM HAVING A DATA SWITCH WITH SIMULTANEOUS INSERTION BUFFERS FOR ELIMINATING ARBITRATION INTERDEPENDENCIES                                  |
| 82173056     | Granted | 7694175       | 2/17/2006   | 4/6/2010   | 11/357385          | US | Methods And Systems For Conducting Processor Health-checks                                                                                                                |
| 82212326     | Granted | 8009491       | 11/6/2009   | 8/30/2011  | 12/614019          | US | Memory Access Strobe Configuration System And Process                                                                                                                     |
| 82215383     | Granted | 7941610       | 4/27/2006   | 5/10/2011  | 11/413158          | US | COHERENCY DIRECTORY UPDATING IN A MULTIPROCESSOR COMPUTING SYSTEM                                                                                                         |

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| 82220321     | Granted      | 7793043       | 8/24/2006   | 9/7/2010   | 11/509449 US       | US | Buffered Memory Architecture                                                                                                                                             |
| 82229624     | Granted      | 8233380       | 11/6/2006   | 7/31/2012  | 11/557009 US       | US | RDMA QP Simplex Switchless Connection                                                                                                                                    |
| 82250474     | Granted      | 8090910       | 12/17/2008  | 1/3/2012   | 12/337013 US       | US | OPERATION OF AN INPUT/OUTPUT LINK                                                                                                                                        |
| 84174500     | Published    |               | 10/22/2012  |            | 14/424197 US       | US | REFRESHING A GROUP OF MEMORY CELLS IN RESPONSE TO PRESENCE OF POTENTIAL DISTURBANCE                                                                                      |
| 90048312     | Acknowledged |               | 4/29/2013   |            |                    | US | NON-VOLATILE MEMORY TO STORE RESETTABLE DATA                                                                                                                             |
| 82253030     | Granted      | 5918207       | 5/1/1996    | 6/29/1999  | 08/641656 US       | US | Process And System For Predictive Resource Planning                                                                                                                      |
| 82253969     | Granted      | 7356458       | 6/27/2002   | 4/8/2008   | 10/180462 US       | US | Multi-Language Correspondence/Form Generator                                                                                                                             |
| 82254095     | Published    |               | 8/1/2008    |            | 12/184677 US       | US | EXECUTING BUSINESS RULES IN A BUSINESS PROCESS                                                                                                                           |
| 82255094     | Granted      | 7593909       | 6/5/2003    | 9/22/2009  | 10/455780 US       | US | Knowledge Representation Using Reflective Links For Link Analysis Applications                                                                                           |
| 82256342     | Published    |               | 12/21/2004  |            | 11/019144 US       | US | SYSTEM AND METHOD FOR PREDICTIVE PRODUCT REQUIREMENTS ANALYSIS                                                                                                           |
| 82257029     | Published    |               | 4/19/2006   |            | 11/379342 US       | US | SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR CONCEPT NETWORK BASED COLLABORATION                                                                                     |
| 82257149     | Granted      | 8386354       | 9/21/2006   | 2/26/2013  | 11/534099 US       | US | DETERMINISTIC PRICING MANAGEMENT OF A PORTFOLIO OF ONE OR MORE APPLICATIONS                                                                                              |
| 82265393     | Granted      | 8996426       | 3/2/2011    | 3/31/2015  | 13/039202 US       | US | Behavior and information model to yield more accurate probability of successful outcome                                                                                  |
| 82834835     | Published    |               | 12/15/2011  |            | 13/327505 US       | US | COMBINATORIAL DOCUMENT MATCHING                                                                                                                                          |
| 82962904     | Granted      | 8639562       | 4/26/2012   | 1/28/2014  | 13/456610 US       | US | COST ENTITY MATCHING                                                                                                                                                     |
| 82964650     | Published    |               | 4/27/2012   |            | 13/457570 US       | US | Optimizing Allocations In A Workforce Allocation Plan                                                                                                                    |
| 83013747     | Published    |               | 1/22/2013   |            | 13/746805 US       | US | CLASSIFYING BASED ON EXTRACTED INFORMATION                                                                                                                               |
| 83729148     | Published    |               | 7/31/2011   |            | 14/116159 US       | US | SYSTEMS AND METHODS OF KNOWLEDGE TRANSFER                                                                                                                                |
| 83786443     | Published    |               | 8/4/2011    |            | 14/234673 US       | US | FEDERATION FOR INFORMATION TECHNOLOGY SERVICE MANAGEMENT                                                                                                                 |
| 84077600     | Application  |               | 7/31/2012   |            | 14/395432 US       | US | SYSTEM ARCHITECTURE GENERATION                                                                                                                                           |
| 82077161     | Granted      | 6286099       | 7/23/1998   | 9/4/2001   | 09/121796 US       | US | DETERMINING POINT OF INTERACTION DEVICE SECURITY PROPERTIES AND ENSURING SECURE TRANSACTIONS IN AN OPEN NETWORKING ENVIRONMENT                                           |
| 82077164     | Granted      | 6163772       | 6/26/1998   | 12/19/2000 | 09/105899 US       | US | Virtual Point Of Sale Processing Using Gateway-Initiated Messages                                                                                                        |
| 82077413     | Granted      | 5983208       | 6/17/1996   | 11/9/1999  | 08/671822 US       | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR HANDLING TRANSACTION RESULTS IN A GATEWAY PAYMENT ARCHITECTURE UTILIZING A MULTICHANNEL, EXTENSIBLE, FLEXIBLE ARCHITECTURE |

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| 82077539     | Granted   | 5931917       | 9/26/1996   | 8/3/1999   | 08/721167          | US | SYSTEM, METHOD AND ARTICLE OF MANUFACTURE FOR GATEWAY SYSTEM ARCHITECTURE WITH SYSTEM ADMINISTRATION INFORMATION ACCESSIBLE FROM A BROWSER |
| 82202591     | Granted   | 7958037       | 3/23/2005   | 6/7/2011   | 11/087791          | US | Method And Apparatus For Product Selection                                                                                                 |
| 82252094     | Granted   | 6567842       | 3/11/2002   | 5/20/2003  | 10/095924          | US | ATM Video Advertising                                                                                                                      |
| 82252661     | Granted   | 5835899       | 3/1/1996    | 11/10/1998 | 08/609694          | US | System And Method For Deriving Financial Responsibility Identification                                                                     |
| 82252844     | Granted   | 5823781       | 7/29/1996   | 10/20/1998 | 08/681745          | US | Electronic Mentor Training System And Method                                                                                               |
| 82253159     | Granted   | 7398234       | 10/25/2000  | 7/8/2008   | 09/696806          | US | Method and System for Organizing Vendor Information                                                                                        |
| 82187045     | Granted   | 7703124       | 3/31/2005   | 4/20/2010  | 11/094989          | US | System And Method For Implementing A Private Virtual Backbone On A Common Network Infrastructure                                           |
| 82252097     | Granted   | 6236995       | 1/30/1998   | 5/22/2001  | 09/016467          | US | Distributed Object System with Deadlock Prevention                                                                                         |
| 82252529     | Granted   | 5918210       | 6/7/1996    | 6/29/1999  | 08/660638          | US | BUSINESS QUERY TOOL, USING POLICY OBJECTS TO PROVIDE QUERY RESPONSES                                                                       |
| 82252535     | Granted   | 5907846       | 6/7/1996    | 5/25/1999  | 08/657580          | US | Method and System for Accessing Relational Databases Using Objects                                                                         |
| 82254590     | Granted   | 8321235       | 11/27/2002  | 11/27/2012 | 10/305175          | US | Validating An Electronic Transaction                                                                                                       |
| 82255469     | Granted   | 8392894       | 5/30/2003   | 3/5/2013   | 10/448549          | US | Method And System For Translating Between Disparate Data Object Models                                                                     |
| 82255907     | Granted   | 7805713       | 10/27/2003  | 9/28/2010  | 10/694518          | US | TRANSACTION PROCESSING ARCHITECTURE                                                                                                        |
| 82256465     | Granted   | 7590631       | 9/2/2004    | 9/15/2009  | 10/932941          | US | System And Method For Guiding Navigation Through A Hypertext System                                                                        |
| 82257212     | Granted   | 8255904       | 12/8/2006   | 8/28/2012  | 11/635906          | US | SYSTEM AND METHOD FOR GENERATING A DISTRIBUTABLE SOFTWARE PACKAGE                                                                          |
| 82257341     | Granted   | 7724149       | 6/11/2007   | 5/25/2010  | 11/761211          | US | APPARATUS, AND ASSOCIATED METHOD, FOR SELECTING DISTRIBUTION OF PREPROCESSING TASKS AT A MULTI-PROCESSOR DATA CENTER                       |
| 82257401     | Granted   | 8473834       | 11/8/2007   | 6/25/2013  | 11/983304          | US | Dynamic Portal Menu And Message System And Method                                                                                          |
| 82257713     | Granted   | 7715429       | 12/6/2004   | 5/11/2010  | 11/003456          | US | Interconnect System For Supply Chain Management Of Virtual Private Network Services                                                        |
| 83640292     | Published |               | 4/7/2011    |            | 14/009306          | US | METHOD AND APPARATUS FOR MOVING A SOFTWARE OBJECT                                                                                          |
| 82198154     | Granted   | 7590141       | 10/28/2005  | 9/15/2009  | 11/262435          | US | Method And Apparatus For An Automatic Network Boot Procedure For A Resource In A Utility Computing Environment                             |
| 82252469     | Granted   | 6012032       | 11/30/1995  | 1/4/2000   | 08/566416          | US | System And Method For Accounting Of Computer Data Storage Utilization                                                                      |
| 82254902     | Granted   | 8694381       | 11/27/2002  | 4/8/2014   | 10/305419          | US | Personal Computer Life Cycle Management/personal Computer Validation Tool                                                                  |

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|--------------|-----------|---------------|-------------|------------|--------------------|----|-----------------------------------------------------------------------------------------------------------------------------------|
| 82255964     | Published |               | 12/5/2003   |            | 10/729607          | US | System And Method For Fault Management In A Service oriented Architecture                                                         |
| 82256903     | Granted   | 8897713       | 3/15/2005   | 11/25/2014 | 11/080331          | US | System, Method, And Computer Program Product For Wireless Network Monitoring                                                      |
| 82257524     | Granted   | 8413107       | 7/15/2008   | 4/2/2013   | 12/218469          | US | ARCHITECTURE FOR SERVICE ORIENTED ARCHITECTURE SOFTWARE FACTORIES                                                                 |
| 82257593     | Granted   | 8484645       | 6/10/2008   | 7/9/2013   | 12/136172          | US | APPARATUS, AND ASSOCIATED METHOD, FOR HANDLING CONTENT PURSUANT TO TRANSFER BETWEEN ENTERPRISE CONTENT MANAGEMENT REPOSITORIES    |
| 83929640     | Published |               | 11/15/2011  |            | 14/353490          | US | MOBILIZED SENSOR SYSTEM                                                                                                           |
| 81966347     | Granted   | 6618825       | 4/20/2000   | 9/9/2003   | 09/553587          | US | Hierarchy Of Fault Isolation Timers                                                                                               |
| 81971156     | Granted   | 6634005       | 5/1/2000    | 10/14/2003 | 09/563763          | US | SYSTEM AND METHOD FOR TESTING AN INTERFACE BETWEEN TWO DIGITAL INTEGRATED CIRCUITS                                                |
| 81971276     | Granted   | 6636906       | 4/28/2000   | 10/21/2003 | 09/560553          | US | APPARATUS AND METHOD FOR ENSURING FORWARD PROGRESS IN COHERENT I/O SYSTEM                                                         |
| 81971843     | Granted   | 6775825       | 10/31/2000  | 8/10/2004  | 09/703949          | US | Common Software Application Definition For Resource Management                                                                    |
| 81972527     | Granted   | 6742152       | 4/11/2001   | 5/25/2004  | 09/834023          | US | Parallel Scan Test Software                                                                                                       |
| 81973652     | Granted   | 6748477       | 3/17/2001   | 6/8/2004   | 09/811193          | US | Multiple-Path Interface Card For Interfacing Multiple Isolated Interfaces To A Storage System                                     |
| 81978959     | Granted   | 6663003       | 2/22/2001   | 12/16/2003 | 09/790754          | US | Apparatus And Method For Retrieving Data Related To A Data Cartridge In A Media Storage System                                    |
| 81984323     | Granted   | 6684377       | 2/7/2001    | 1/27/2004  | 09/779301          | US | ACCESS CELL DESIGN AND A METHOD FOR ENABLING AUTOMATIC INSERTION OF ACCESS CELLS INTO AN INTEGRATED CIRCUIT DESIGN                |
| 81990815     | Granted   | 6857036       | 7/17/2001   | 2/15/2005  | 09/907072          | US | Hardware Method For Implementing Atomic Semaphore Operations Using Code Macros                                                    |
| 81993752     | Granted   | 7216226       | 4/1/2002    | 5/8/2007   | 10/113073          | US | Unique And Secure Identification Of A Networked Computing Node                                                                    |
| 81994250     | Granted   | 6703652       | 1/16/2002   | 3/9/2004   | 10/051677          | US | MEMORY STRUCTURE AND METHOD MAKING                                                                                                |
| 81994502     | Granted   | 6898785       | 8/16/2001   | 5/24/2005  | 09/930937          | US | HANDLING CALLS FROM RELOCATED INSTRUMENTED FUNCTIONS TO FUNCTIONS THAT EXPECT A RETURN POINTER VALUE IN AN ORIGINAL ADDRESS SPACE |
| 81997685     | Granted   | 7734867       | 5/17/2002   | 6/8/2010   | 10/150595          | US | DATA STORAGE USING DISK DRIVES IN ACCORDANCE WITH A SCHEDULE OF OPERATIONS                                                        |
| 81997811     | Granted   | 6627811       | 7/31/2001   | 9/30/2003  | 09/918976          | US | Cable Protective Shield Assembly                                                                                                  |
| 81998495     | Granted   | 6865614       | 7/2/2001    | 3/8/2005   | 09/897349          | US | METHOD FOR TRANSFERRING A PACKED DATA STRUCTURE TO AN UNPACKED DATA STRUCTURE BY COPYING THE PACKED DATA USING POINTER            |
| 82000868     | Granted   | 6645841       | 11/16/2001  | 11/11/2003 | 10/016039          | US | Selective Solder Bump Application                                                                                                 |

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| 82000931     | Granted | 7047437       | 12/12/2001  | 5/16/2006  | 10/021170          | US | Method And System For Detecting Dropped Micro-Pack                                                                       |
| 82002368     | Granted | 7228527       | 7/15/2003   | 6/5/2007   | 10/619528          | US | Method And System For Structuring A Procedure                                                                            |
| 82002491     | Granted | 6950962       | 10/12/2001  | 9/27/2005  | 09/976727          | US | Method And Apparatus For Kernel Module Testing                                                                           |
| 82003364     | Granted | 6644481       | 2/11/2002   | 11/11/2003 | 10/073478          | US | Apparatus And Method For Rackmounting A Chassis                                                                          |
| 82003490     | Granted | 6675720       | 8/31/2001   | 1/13/2004  | 09/944642          | US | Management System For Multiple Cables                                                                                    |
| 82006118     | Granted | 6728837       | 11/2/2001   | 4/27/2004  | 09/985426          | US | Adaptive Data Insertion For Caching                                                                                      |
| 82006922     | Granted | 6773616       | 12/26/2001  | 8/10/2004  | 10/033408          | US | Formation Of Nanoscale Wires                                                                                             |
| 82007174     | Granted | 6736277       | 5/23/2003   | 5/18/2004  | 10/444437          | US | Adjustable Rackmount Assembly                                                                                            |
| 82012046     | Granted | 5774505       | 4/4/1996    | 6/30/1998  | 08/628173          | US | Intersymbol Interference Cancellation With Reduced Complexity                                                            |
| 82014170     | Granted | 5886540       | 5/31/1996   | 3/23/1999  | 08/658920          | US | EVALUATION PHASE EXPANSION FOR DYNAMIC LOGIC CIRCUITS                                                                    |
| 82016792     | Granted | 5815721       | 4/25/1996   | 9/29/1998  | 08/637988          | US | Method And Apparatus For Optimizing Complex Control Structures Using Abstract Web Patterns                               |
| 82017668     | Granted | 5838810       | 10/10/1996  | 11/17/1998 | 08/728452          | US | Method And System Of Detecting Profile Maturation Using Image Processing Techniques                                      |
| 82020536     | Granted | 5805470       | 10/10/1996  | 9/8/1998   | 08/728468          | US | VERIFICATION OF INSTRUCTION AND DATA FETCH RESOURCES IN A FUNCTIONAL MODEL OF A SPECULATIVE OUT-OF ORDER COMPUTER SYSTEM |
| 82022093     | Granted | 5784550       | 10/29/1996  | 7/21/1998  | 08/739244          | US | Method For Enhanced Functional Testing Of A Processor Using Dynamic Trap Handlers                                        |
| 82022471     | Granted | 5943499       | 11/27/1996  | 8/24/1999  | 08/757539          | US | System And Method For Solving General Global Data Flow Predicated Code Problems                                          |
| 82024223     | Granted | 5940839       | 4/4/1997    | 8/17/1999  | 08/835089          | US | FAULT-TOLERANT SYSTEM AND METHOD OF MANAGING TRANSACTION FAILURES IN HIERARCHIES                                         |
| 82024466     | Granted | 5892940       | 12/5/1996   | 4/6/1999   | 08/759584          | US | Aliasing Nodes To Improve The Code Generated By A Circuit Compiler                                                       |
| 82026782     | Granted | 5987576       | 2/27/1997   | 11/16/1999 | 08/807161          | US | METHOD AND APPARATUS FOR GENERATING AND DISTRIBUTING CLOCK SIGNALS WITH MINIMAL SKEW                                     |
| 82027343     | Granted | 6128773       | 10/1/1997   | 10/3/2000  | 08/941829          | US | AUTOMATICALLY MEASURING SOFTWARE COMPLEXITY                                                                              |
| 82027592     | Granted | 6117187       | 9/30/1997   | 9/12/2000  | 08/940756          | US | Automatic Generation Of A Software Installation Package                                                                  |
| 82028342     | Granted | 6668314       | 6/24/1997   | 12/23/2003 | 08/881196          | US | Virtual Memory Translation Control By TLB Purge Monitoring                                                               |
| 82030151     | Granted | 6181050       | 10/27/1997  | 1/30/2001  | 08/958635          | US | Electrostatic Micromotor With Large In Plane Force And No Out Of Plane Force                                             |
| 82030964     | Granted | 6243287       | 1/27/2000   | 6/5/2001   | 09/492510          | US | Distributed Decode System And Method For Improving Static Random Access Memory (SRAM) Density                            |

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| 82031153     | Granted | 6807625       | 2/18/2000   | 10/19/2004 | 09/507032          | US | METHOD AND APPARATUS FOR EFFICIENTLY GENERATING AND STORING, AND CONSUMING ARITHMETIC FLAGS BETWEEN PRODUCING AND CONSUMING MACROINSTRUCTIONS WHEN EMULATING WITH MICROINSTRUCTIONS |
| 82031396     | Granted | 7343479       | 6/25/2003   | 3/11/2008  | 10/602916          | US | Method And Apparatus For Implementing Two Architectures In A Chip                                                                                                                   |
| 82034021     | Granted | 6064820       | 5/27/1998   | 5/16/2000  | 09/085299          | US | APPARATUS AND METHOD TO INCREMENTALLY UPDATE SINGLE STATIC ASSIGNMENT (SSA) FORM                                                                                                    |
| 82034147     | Granted | 5926370       | 10/29/1998  | 7/20/1999  | 09/182939          | US | Method And Apparatus For A Modular Integrated Apparatus For Multi-Function Components                                                                                               |
| 82035206     | Granted | 6084824       | 10/20/1998  | 7/4/2000   | 09/175891          | US | Optical Card Reader Including Mechanical Scanning Assembly                                                                                                                          |
| 82036271     | Granted | 6651088       | 7/20/1999   | 11/18/2003 | 09/358582          | US | Method For Reducing Coherent Misses In Shared-Memory Multiprocessors Utilizing Lock-Binding Prefetchs                                                                               |
| 82036394     | Granted | 6072952       | 4/22/1998   | 6/6/2000   | 09/064933          | US | Method And Apparatus For Coalescing Variables                                                                                                                                       |
| 82038518     | Granted | 6151672       | 2/23/1998   | 11/21/2000 | 09/028258          | US | Methods And Apparatus For Reducing Interference In A Branch History Table Of A Microprocessor                                                                                       |
| 82039019     | Granted | 6160703       | 6/23/1998   | 12/12/2000 | 09/103667          | US | Shock Mounting System For Data Storage Modules                                                                                                                                      |
| 82039205     | Granted | 6278624       | 12/1/1999   | 8/21/2001  | 09/452310          | US | HIGH AVAILABILITY DC POWER SUPPLY WITH ISOLATED INPUTS, DIODE-OR-CONNECTED OUTPUTS, AND FACTOR CORRECTION                                                                           |
| 82039325     | Granted | 6272552       | 9/24/1998   | 8/7/2001   | 09/160463          | US | DUAL CHANNEL 100BASE-T LINK FOR COMPUTER NETWORKS                                                                                                                                   |
| 82040951     | Granted | 6185669       | 2/18/1999   | 2/6/2001   | 09/252367          | US | SYSTEM FOR FETCHING MAPPED BRANCH TARGET INSTRUCTIONS OF OPTIMIZED CODE PLACED INTO A TRACE MEMORY                                                                                  |
| 82043882     | Granted | 6456622       | 3/3/1999    | 9/24/2002  | 09/261769          | US | METHOD FOR KNOWLEDGE ACQUISITION FOR DIAGNOSTIC BAYESIAN NETWORKS                                                                                                                   |
| 82044200     | Granted | 6625807       | 8/10/1999   | 9/23/2003  | 09/371466          | US | APPARATUS AND METHOD FOR EFFICIENTLY OBTAINING AND UTILIZING REGISTER USAGE INFORMATION DURING SOFTWARE BINARY TRANSLATION                                                          |
| 82044569     | Granted | 7100025       | 1/28/2000   | 8/29/2006  | 09/491810          | US | APPARATUS AND METHOD FOR PERFORMING SINGLE-INSTRUCTION MULTIPLE-DATA INSTRUCTIONS                                                                                                   |
| 82044884     | Granted | 6779100       | 12/17/1999  | 8/17/2004  | 09/465900          | US | Method And Device For Address Translation For Compressed Instructions                                                                                                               |
| 82085531     | Granted | 6198655       | 12/10/1999  | 3/6/2001   | 09/459246          | US | ELECTRICALLY ADDRESSABLE VOLATILE AND NON-VOLATILE MOLECULAR-BASED SWITCHING DEVICES                                                                                                |
| 82105817     | Granted | 7191380       | 9/10/2003   | 3/13/2007  | 10/659892          | US | Defect-tolerant And Fault-tolerant Circuit Interconnections                                                                                                                         |
| 82201529     | Granted | 7447055       | 4/22/2005   | 11/4/2008  | 11/112085          | US | Multiplexer Interface To A Nanoscale-crossbar                                                                                                                                       |
| 82201904     | Granted | 7763552       | 4/28/2006   | 7/27/2010  | 11/413476          | US | Method Of Interconnect Formation Using Focused Beams                                                                                                                                |

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| 82214699     | Granted   | 8502198       | 4/28/2006   | 8/6/2013   | 11/414578          | US | Switching Device And Methods For Controlling Electron Tunneling Therein                                                  |
| 82214702     | Granted   | 7778061       | 10/16/2006  | 8/17/2010  | 11/582208          | US | Crossbar-memory Systems And Methods For Writing To and Reading From Crossbar Memory Junctions Of Crossbar-memory Systems |
| 82218821     | Granted   | 7544977       | 1/27/2006   | 6/9/2009   | 11/342076          | US | Mixed-scale Electronic Interface                                                                                         |
| 82249223     | Granted   | 8093575       | 4/20/2009   | 1/10/2012  | 12/426647          | US | MEMRISTIVE DEVICE WITH A BI-METALLIC ELECTRODE                                                                           |
| 82260215     | Granted   | 7982504       | 1/29/2010   | 7/19/2011  | 12/696361          | US | INTERCONNECTION ARCHITECTURE FOR MULTILAYER CIRCUITS                                                                     |
| 82260401     | Granted   | 8207519       | 4/19/2010   | 6/26/2012  | 12/763091          | US | IONIC-MODULATED DOPANT PROFILE CONTROL IN NANOSCALE SWITCHING DEVICES                                                    |
| 82262084     | Granted   | 8472262       | 6/10/2010   | 6/25/2013  | 12/813003          | US | SENSE AMPLIFIER FOR READING A CROSSBAR MEMORY ARRAY                                                                      |
| 82263521     | Granted   | 8325507       | 9/29/2010   | 12/4/2012  | 12/893825          | US | MEMRISTORS WITH AN ELECTRODE METAL RESERVOIR FOR DOPANTS                                                                 |
| 82264706     | Granted   | 8314475       | 11/9/2010   | 11/20/2012 | 12/942131          | US | NANOSCALE ELECTRONIC DEVICE WITH ANISOTROPIC DIELECTRIC MATERIAL                                                         |
| 82264709     | Published |               | 10/29/2010  |            | 12/916414          | US | SEMICONDUCTOR DEVICE FOR PROVIDING HEAT MANAGEMENT                                                                       |
| 82659238     | Granted   | 8503217       | 4/30/2011   | 8/6/2013   | 13/098453          | US | RECONFIGURABLE CROSSBAR MEMORY ARRAY                                                                                     |
| 82678319     | Granted   | 8436330       | 12/23/2008  | 5/7/2013   | 13/121918          | US | Electrically Actuated Devices                                                                                            |
| 82747699     | Granted   | 8907455       | 1/28/2009   | 12/9/2014  | 13/130817          | US | Voltage-controlled Switches                                                                                              |
| 82747719     | Granted   | 9000411       | 1/6/2009    | 4/7/2015   | 13/130799          | US | MEMRISTOR DEVICES CONFIGURED TO CONTROL BUBBLE FORMATION                                                                 |
| 82747722     | Granted   | 8787064       | 1/13/2009   | 7/22/2014  | 13/130805          | US | Programmable Bipolar Electronic Device                                                                                   |
| 82749133     | Granted   | 8729518       | 10/25/2011  | 5/20/2014  | 13/281186          | US | MULTILAYER STRUCTURE BASED ON A NEGATIVE DIFFERENTIAL RESISTANCE MATERIAL                                                |
| 82837334     | Granted   | 8812418       | 6/22/2009   | 8/19/2014  | 13/256246          | US | Memristive Adaptive Resonance Networks                                                                                   |
| 82853040     | Granted   | 8542522       | 7/23/2009   | 9/24/2013  | 13/259164          | US | NON-VOLATILE DATA-STORAGE LATCH                                                                                          |
| 82924178     | Granted   | 8611134       | 3/25/2010   | 12/17/2013 | 13/383622          | US | SYSTEMS AND METHODS FOR ROW-WIRE VOLTAGE-LOSS COMPENSATION IN CROSSBAR ARRAYS                                            |
| 82963093     | Published |               | 4/13/2012   |            | 13/445995          | US | FLAT-PANEL DISPLAY INCLUDING MEMRISTIVE DEVICES                                                                          |
| 82978178     | Granted   | 9037672       | 6/15/2012   | 5/19/2015  | 13/524659          | US | NON-VOLATILE MEMORY PHYSICAL NETWORKS                                                                                    |
| 83100548     | Granted   | 8890106       | 12/18/2012  | 11/18/2014 | 13/718689          | US | HYBRID CIRCUIT OF NITRIDE-BASED TRANSISTOR AND MEMRISTOR                                                                 |
| 83101896     | Published |               | 1/29/2013   |            | 13/753511          | US | LOCALLY ACTIVE MEMRISTIVE DEVICE                                                                                         |
| 83138650     | Allowed   |               | 2/28/2013   |            | 13/781114          | US | MEMORY ELEMENTS WITH SERIES VOLATILE AND NONVOLATILE SWITCHES                                                            |

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| 83141544     | Granted     | 9015405       | 6/29/2010   | 4/21/2015  | 13/805169          | US | METHOD AND SYSTEM FOR ENCODING DATA FOR STORAGE IN A MEMORY ARRAY                                                                                                       |
| 83235043     | Published   |               | 10/21/2010  |            | 13/880269          | US | METAL-INSULATOR TRANSITION SWITCHING DEVICES                                                                                                                            |
| 83256537     | Granted     | 8971091       | 1/31/2011   | 3/3/2015   | 13/884140          | US | METHOD AND CIRCUIT FOR SWITCHING A MEMRISTIVE DEVICE IN AN ARRAY                                                                                                        |
| 83623283     | Allowed     |               | 2/28/2011   |            | 14/001835          | US | MEMRISTIVE ELEMENTS THAT EXHIBIT MINIMAL SNEAK PATH CURRENT                                                                                                             |
| 83815245     | Granted     | 9064568       | 8/26/2011   | 6/23/2015  | 14/239053          | US | CIRCUIT AND METHOD FOR READING A RESISTIVE SWITCHING DEVICE IN AN ARRAY                                                                                                 |
| 83834203     | Published   |               | 9/2/2011    |            | 14/342431          | US | APPARATUS TO STORE DATA AND METHODS TO READ MEMORY CELLS                                                                                                                |
| 83857924     | Published   |               | 10/12/2011  |            | 14/345295          | US | SELECT DEVICE FOR CROSS POINT MEMORY STRUCTURES                                                                                                                         |
| 84013988     | Granted     | 8923034       | 8/21/2014   | 12/30/2014 | 14/464803          | US | Multi-level Memory Cell with Continuously Tunable Switching                                                                                                             |
| 90050937     | Application |               | 9/4/2015    |            | 14/845714          | US | NEURISTOR-BASED RESERVOIR COMPUTING DEVICES                                                                                                                             |
| 81993566     | Granted     | 6999998       | 10/4/2001   | 2/14/2006  | 09/971135          | US | Shared Memory Coupling Of Network Infrastructure Devices                                                                                                                |
| 81998186     | Granted     | 8145790       | 7/11/2002   | 3/27/2012  | 10/192631          | US | Method And Device For Using Dynamic Updates In A Network                                                                                                                |
| 82058060     | Granted     | 6678746       | 8/1/2000    | 1/13/2004  | 09/630033          | US | Processing Network Packets                                                                                                                                              |
| 82085777     | Granted     | 7920476       | 10/8/2003   | 4/5/2011   | 10/680911          | US | Network Congestion Control                                                                                                                                              |
| 82183112     | Granted     | 7372820       | 10/29/2004  | 5/13/2008  | 10/977147          | US | SYSTEM AND METHOD FOR STRIPING DELAY-SENSITIVE DATA OVER MULTIPLE BURSTY CHANNELS                                                                                       |
| 82217567     | Granted     | 8254264       | 4/28/2006   | 8/28/2012  | 11/414059          | US | Network Latency Estimation                                                                                                                                              |
| 82228121     | Granted     | 7813351       | 4/13/2007   | 10/12/2010 | 11/787008          | US | Available Bandwidth Estimation                                                                                                                                          |
| 82247036     | Granted     | 7995595       | 10/30/2008  | 8/9/2011   | 12/261789          | US | Method For Efficiently Detecting Node Addresses                                                                                                                         |
| 82260833     | Granted     | 8811398       | 4/30/2010   | 8/19/2014  | 12/770978          | US | Method For Routing Data Packets Using Vians                                                                                                                             |
| 82838098     | Allowed     |               | 10/31/2011  |            | 13/285803          | US | Generating EGT Network Topologies                                                                                                                                       |
| 82916249     | Published   |               | 4/12/2012   |            | 13/444942          | US | ASSIGNING SELECTED GROUPS TO ROUTING STRUCTURES                                                                                                                         |
| 82916269     | Published   |               | 4/3/2012    |            | 13/438493          | US | Solving Under-Determined Problems for Networks                                                                                                                          |
| 82916409     | Granted     | 8811408       | 4/30/2012   | 8/19/2014  | 13/460132          | US | ROUTING DATA PACKETS ON A NETWORK                                                                                                                                       |
| 82963525     | Published   |               | 4/5/2012    |            | 13/440793          | US | Communications Security in Multiple-Antenna Wireless Networks                                                                                                           |
| 83721282     | Published   |               | 6/7/2011    |            | 14/122164          | US | A SCALABLE MULTI-TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS                                                                                                |
| 83815016     | Published   |               | 9/23/2011   |            | 14/240511          | US | Extrapolating Channel State Information ("CSI") Estimates From Multiple Packets Sent Over Different Antennas to Generate a Combined CSI Estimate for a MIMO-OFDM System |

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| 84089359     | Published   |               | 5/4/2012    |            | 14/397419          | US | Context-Aware HTTP Compression                                                                             |
| 84303894     | Application |               | 7/22/2015   |            | 14/805,629         | US | Generating Network Topologies                                                                              |
| 90017120     | Application |               | 1/31/2013   |            | 14/763797          | US | INDEXED SHAPED GRAPH CREATION                                                                              |
| 90051518     | Application |               | 3/7/2013    |            | 14/773031          | US | DISTRIBUTED ANTENNA SYSTEM OVER ETHERNET                                                                   |
| 82094639     | Granted     | 7983422       | 7/25/2003   | 7/19/2011  | 10/627158          | US | QUANTUM CRYPTOGRAPHY                                                                                       |
| 82168127     | Granted     | 6975514       | 1/31/2003   | 12/13/2005 | 10/355419          | US | Integrated Vcels On Traditional VLSI Packaging                                                             |
| 8215489      | Granted     | 8447146       | 1/11/2008   | 5/21/2013  | 12/008605          | US | Photonic Interconnect System                                                                               |
| 8215495      | Granted     | 7546004       | 1/11/2008   | 6/9/2009   | 12/008554          | US | Photonic Interconnect System                                                                               |
| 82178486     | Granted     | 7813613       | 12/3/2009   | 10/12/2010 | 12/630053          | US | Optical Connections And Methods Of Forming Optical Connections                                             |
| 82178492     | Granted     | 7344315       | 11/3/2004   | 3/18/2008  | 10/979989          | US | Optical Connections And Methods Of Forming Optical Connections                                             |
| 82180925     | Granted     | 7002133       | 10/3/2003   | 2/21/2006  | 10/678437          | US | DETECTING ONE OR MORE PHOTONS FROM THEIR INTERACTIONS WITH PROBE PHOTONS IN A MATTER SYSTEM                |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82181489     | Granted     | 7133173       | 7/26/2004   | 11/7/2006  | 10/899332          | US | Nonlinear Electromagnetic Quantum Information Processing                                                   |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82210514     | Granted     | 7474823       | 10/12/2006  | 1/6/2009   | 11/581194          | US | Tunable Dispersion Compensation                                                                            |
| 82214633     | Granted     | 7609932       | 7/6/2006    | 10/27/2009 | 11/481687          | US | Slot Waveguide Structure                                                                                   |
| 82214636     | Granted     | 7805826       | 7/6/2006    | 10/5/2010  | 11/481716          | US | Fabrication Of Slot Waveguide                                                                              |
| 82214696     | Granted     | 7910915       | 10/23/2008  | 3/22/2011  | 12/288860          | US | Nanowire Devices And Systems, Light-emitting Nanowires, And Methods Of Precisely Positioning Nanoparticles |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82217387     | Granted     | 8135276       | 8/11/2006   | 3/13/2012  | 11/990421          | US | QUANTUM REPEATER                                                                                           |
| 82217507     | Granted     | 7836007       | 1/30/2006   | 11/16/2010 | 11/343639          | US | Methods For Preparing Entangled Quantum States                                                             |
| 82217699     | Granted     | 7426444       | 4/19/2006   | 9/16/2008  | 11/407600          | US | Methods For Determining Relative Phase Differences In Entangled Quantum States                             |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82222694     | Granted     | 7880251       | 4/26/2007   | 2/1/2011   | 11/789821          | US | Structure Having Nanoapertures                                                                             |
| 82223567     | Granted     | 7701629       | 4/19/2007   | 4/20/2010  | 11/788445          | US | Photonic Device Including Semiconductor Structure Having Doped Region With Array Of Subwavelength Recesses |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82229309     | Granted     | 7965436       | 4/26/2007   | 6/21/2011  | 11/796182          | US | MICRON-SIZE OPTICAL FARADAY ROTATOR                                                                        |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82230368     | Granted     | 7805080       | 6/22/2007   | 9/28/2010  | 11/821532          | US | Optical Interconnect                                                                                       |
| 82230497     | Granted     | 7907654       | 4/27/2007   | 3/15/2011  | 11/796324          | US | LASER DIODE WITH A GRATINGS LAYER                                                                          |
| 82230560     | Granted     | 7548671       | 7/16/2007   | 6/16/2009  | 11/879242          | US | Optical Device Including Waveguide Grating Structure                                                       |
| 82230620     | Granted     | 7964927       | 10/1/2008   | 6/21/2011  | 12/243155          | US | SEMICONDUCTOR DEVICE AND METHOD FOR STRAIN CONTROLLED OPTICAL ABSORPTION                                   |
|              |             |               |             |            |                    |    |                                                                                                            |
| 82230623     | Granted     | 7849122       | 4/18/2007   | 12/7/2010  | 11/787903          | US | Self-authenticating Quantum Random Bit Generators                                                          |
| 82234550     | Granted     | 8673217       | 10/18/2007  | 3/18/2014  | 11/975538          | US | Sensor Using Plasmon Resonance                                                                             |
| 82234556     | Granted     | 8009943       | 10/20/2008  | 8/30/2011  | 12/254415          | US | Magnetically Activated Photonic Switches And Switch Fabrics Employing The Same                             |
| 82234679     | Granted     | 7609916       | 9/13/2007   | 10/27/2009 | 11/900714          | US | Electrical Contact Apparatus For Optical Waveguides                                                        |

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|--------------|-------------|---------------|-------------|------------|--------------------|----|------------------------------------------------------------------------------------------|
| 82238549     | Published   |               | 1/30/2008   |            | 12/864205          | US | NANOSTRUCTURES AND METHODS OF MAKING THE SAME                                            |
| 82240673     | Granted     | 8198/06       | 10/1/2008   | 6/12/2012  | 12/243853          | US | MULTI-LEVEL NANOWIRE STRUCTURE AND METHOD OF MAKING THE SAME                             |
| 82240985     | Granted     | 8098492       | 10/31/2008  | 1/17/2012  | 12/263374          | US | DATA PROCESSING MODULES AND SYSTEMS                                                      |
| 82241111     | Granted     | 7692135       | 10/31/2008  | 4/6/2010   | 12/262359          | US | WDM Signal Detector                                                                      |
| 82243352     | Granted     | 7532785       | 10/23/2007  | 5/12/2009  | 11/975974          | US | Photonic Interconnects For Computer System Devices                                       |
| 82243358     | Granted     | 7889956       | 4/29/2009   | 2/15/2011  | 12/387216          | US | Photonic Interconnects For Computer System Devices                                       |
| 82260272     | Granted     | 8265435       | 1/29/2010   | 9/11/2012  | 12/696330          | US | OPTICAL FIBER COUPLING SYSTEMS AND METHODS FOR FABRICATING THE SAME                      |
| 82260278     | Published   |               | 1/5/2010    |            | 12/652278          | US | LIGHT EMITTING DIODE DEVICE                                                              |
| 82261775     | Published   |               | 7/30/2010   |            | 12/847444          | US | OPTICAL POWER DIVIDER                                                                    |
| 82405427     | Granted     | 8712198       | 5/9/2008    | 4/29/2014  | 12/991651          | US | Optical Splitter Device                                                                  |
| 82554389     | Published   |               | 5/23/2008   |            | 12/994118          | US | Optical Interconnect                                                                     |
| 82755920     | Granted     | 8837544       | 10/28/2011  | 9/16/2014  | 13/284262          | US | QUANTUM OPTICAL DEVICE                                                                   |
| 82774443     | Allowed     |               | 1/7/2009    |            | 13/143649          | US | PHOTONIC WAVEGUIDE                                                                       |
| 82852236     | Granted     | 8718422       | 4/28/2009   | 5/6/2014   | 13/258420          | US | ANGLED COUPLING FOR OPTICAL FIBERS                                                       |
| 82852957     | Granted     | 8485738       | 7/31/2009   | 7/16/2013  | 13/258599          | US | Optical Fiber Connector                                                                  |
| 82853066     | Published   |               | 9/18/2009   |            | 13/259444          | US | LIGHT-EMITTING DIODE INCLUDING A METAL-DIELECTRIC-METAL STRUCTURE                        |
| 82922738     | Published   |               | 7/17/2009   |            | 13/383267          | US | NON-PERIODIC GRATING REFLECTORS WITH FOCUSING POWER AND METHODS FOR FABRICATING THE SAME |
| 82930498     | Granted     | 8885991       | 12/21/2009  | 11/11/2014 | 13/384878          | US | CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC                                          |
| 82930504     | Granted     | 9011020       | 1/6/2010    | 4/21/2015  | 13/384883          | US | OPTICAL INTERCONNECT                                                                     |
| 82930541     | Published   |               | 9/23/2009   |            | 13/384725          | US | OPTICAL DEVICES BASED ON DIFFRACTION GRATINGS                                            |
| 82978201     | Granted     | 8883616       | 7/31/2012   | 11/11/2014 | 13/563222          | US | GERMANIUM ON INSULATOR APPARATUS                                                         |
| 83019366     | Granted     | 8357926       | 6/1/2012    | 1/22/2013  | 13/486291          | US | GAIN-CLAMPED SEMICONDUCTOR OPTICAL AMPLIFIERS                                            |
| 83266112     | Published   |               | 12/20/2010  |            | 13/990009          | US | VERTICAL-CAVITY SURFACE-EMITTING LASER SYSTEM AND METHOD FOR FABRICATING THE SAME        |
| 83422024     | Granted     | 8929694       | 1/20/2011   | 1/6/2015   | 13/978039          | US | COMPOSITE PROCESSORS                                                                     |
| 83791169     | Published   |               | 7/29/2011   |            | 14/234987          | US | OPTICAL POWER SPLITTERS                                                                  |
| 83948721     | Published   |               | 1/9/2012    |            | 14/362233          | US | Optical Connections                                                                      |
| 84020543     | Published   |               | 4/30/2012   |            | 14/385250          | US | HYBRID MOS OPTICAL MODULATOR                                                             |
| 84076060     | Published   |               | 6/28/2012   |            | 14/396429          | US | Optical Shuffling                                                                        |
| 84112897     | Application |               | 7/30/2012   |            | 14/416124          | US | OPTICAL COUPLING SYSTEM AND METHOD FOR FABRICATING THE SAME                              |
| 84158908     | Application |               | 9/13/2012   |            | 14/423804          | US | CONTROLLING TEMPERATURES IN OPTICAL CIRCUITS                                             |
| 84273744     | Published   |               | 6/1/2015    |            | 14/727040          | US | CIRCUIT MODULE                                                                           |
| 84282231     | Application |               | 6/17/2015   |            | 14/742279          | US | THERMAL SHUNT                                                                            |
| 84282237     | Application |               | 6/19/2015   |            | 14/744245          | US | VERTICAL-CAVITY SURFACE-EMITTING LASERS WITH NON-PERIODIC GRATINGS                       |

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| 90017240     | Application |               | 1/24/2013   |            | 14/763136          | US | METHODS AND APPARATUS TO REMOVE DUST FROM AN OPTICAL WAVEGUIDE ASSEMBLY                                              |
| 82243043     | Application |               | 10/30/2008  |            | 12/261317          | US | COMPUTER EXECUTABLE SERVICE                                                                                          |
| 82243046     | Granted     | 8392566       | 10/30/2008  | 3/5/2013   | 12/261187          | US | COMPUTER EXECUTABLE SERVICES                                                                                         |
| 82852336     | Published   |               | 7/28/2009   |            | 13/258751          | US | CONTROLLING CLOUD SERVICES                                                                                           |
| 82919306     | Granted     | 8930887       | 8/3/2009    | 1/6/2015   | 13/384675          | US | LINKING MODEL INSTANCES TO PACKAGES                                                                                  |
| 84172854     | Application |               | 4/30/2015   |            | 14/701441          | US | NAMING OF CLOUD COMPONENTS                                                                                           |
| 84172871     | Application |               | 4/30/2015   |            | 14/701433          | US | CLOUD IMAGES                                                                                                         |
| 82268075     | Granted     | 5971777       | 11/21/1997  | 10/26/1999 | 08/976199          | US | BREAKAWAY PHYSICAL/ELECTRICAL MEDIA JACK                                                                             |
| 82268078     | Granted     | 6186803       | 7/1/1999    | 2/13/2001  | 09/345891          | US | BREAKWAY PHYSICAL/ELECTRICAL MEDIA JACK                                                                              |
| 82274693     | Granted     | 6983323       | 8/12/2002   | 1/3/2006   | 10/217862          | US | Multi-level packet screening with dynamically selected filtering criteria                                            |
| 82274759     | Granted     | 7095715       | 7/2/2001    | 8/22/2006  | 09/897189          | US | System and Method for Processing Network Packet Flows                                                                |
| 82274762     | Granted     | 7633868       | 6/23/2006   | 12/15/2009 | 11/473885          | US | System and Method for Processing Network Packet Flows                                                                |
| 82275008     | Granted     | 8458796       | 3/8/2011    | 6/4/2013   | 13/043287          | US | METHODS AND SYSTEMS FOR FULL PATTERN MATCHING IN HARDWARE                                                            |
| 82579221     | Granted     | 8230507       | 6/1/2010    | 7/24/2012  | 12/791556          | US | Modular Agent For Network Security Intrusion Detection System                                                        |
| 82579241     | Granted     | 7650638       | 12/2/2002   | 1/19/2010  | 10/308417          | US | Network Security Monitoring System Employing Bi-Directional Communication                                            |
| 82579278     | Granted     | 8015604       | 10/10/2003  | 9/6/2011   | 10/683221          | US | Hierarchical Architecture In A Network Security System                                                               |
| 82579318     | Granted     | 8099782       | 11/17/2009  | 1/17/2012  | 12/620345          | US | Event Aggregation In A Network                                                                                       |
| 82579407     | Granted     | 8850565       | 1/10/2005   | 9/30/2014  | 10/905537          | US | System And Method For Coordinating Network Incident Response Activities                                              |
| 82579424     | Published   |               | 5/27/2010   |            | 12/789318          | US | Specifying a Parser Using a Properties File                                                                          |
| 82579553     | Granted     | 9031916       | 12/28/2007  | 5/12/2015  | 11/966078          | US | Storing Log Data Efficiently While Supporting Querying To Assist In Computer Network Security                        |
| 83422193     | Published   |               | 10/11/2011  |            | 13/984976          | US | Network Topology Discovery                                                                                           |
| 84038227     | Published   |               | 5/30/2012   |            | 14/398017          | US | PARAMETER ADJUSTMENT FOR PATTERN DISCOVERY                                                                           |
| 84312765     | Application |               | 1/28/2013   |            | 14/763190          | US | DISPLAYING REAL-TIME SECURITY EVENTS                                                                                 |
| 82093082     | Granted     | 7596792       | 8/7/2002    | 9/29/2009  | 10/212692          | US | Method And System For Supporting A Plurality Of Event Types                                                          |
| 82105943     | Granted     | 8914606       | 1/20/2005   | 12/16/2014 | 11/038379          | US | System And Method For Soft Partitioning A Computer System                                                            |
| 82120616     | Granted     | 8539340       | 1/4/2002    | 9/17/2013  | 10/037683          | US | METHOD TO SERVE REAL-TIME DATA IN EMBEDDED WEB SERVER                                                                |
| 82128605     | Granted     | 6233634       | 8/17/1996   | 5/15/2001  | 08/697678          | US | SERVER CONTROLLER CONFIGURED TO SNOOP AND RECEIVE A DUPLICATIVE COPY OF DISPLAY DATA PRESENTED TO A VIDEO CONTROLLER |
| 82132604     | Granted     | 6098143       | 6/25/1998   | 8/1/2000   | 09/105725          | US | REMOTE SERVER MANAGEMENT DEVICE                                                                                      |

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| 82135226     | Granted     | 6145102       | 1/20/1998   | 11/7/2000  | 09/009084          | US | TRANSMISSION OF AN ERROR MESSAGE OVER A NETWORK BY A COMPUTER WHICH FAILS A SELF-TEST                                                                                   |
| 82135658     | Granted     | 6212530       | 5/12/1998   | 4/3/2001   | 09/076373          | US | METHOD AND APPARATUS BASED ON RELATIONAL DATABASE DESIGN TECHNIQUES SUPPORTING MODELING ANALYSIS AND AUTOMATIC HYPERTEXT GENERATION FOR STRUCTURED DOCUMENT COLLECTIONS |
| 82136471     | Granted     | 6134665       | 1/20/1998   | 10/17/2000 | 09/009809          | US | COMPUTER WITH REMOTE WAKE UP AND TRANSMISSION OF A STATUS PACKET WHEN THE COMPUTER FAILS A SELF TEST                                                                    |
| 82187669     | Granted     | 8933941       | 8/23/2005   | 1/13/2015  | 11/209886          | US | Method And Apparatus For Redirection Of Video Data                                                                                                                      |
| 82222127     | Granted     | 7721120       | 9/7/2006    | 5/18/2010  | 11/517104          | US | Controlling Fan Speed In Electronic System                                                                                                                              |
| 8226126      | Granted     | 7694093       | 4/27/2007   | 4/6/2010   | 11/741487          | US | Memory Module And Method For Mirroring Data By Rank                                                                                                                     |
| 8226252      | Granted     | 7783876       | 5/1/2007    | 8/24/2010  | 11/742594          | US | COMPARING CHARACTERISTICS PRIOR TO BOOTING DEVICES                                                                                                                      |
| 82231931     | Granted     | 7761622       | 7/26/2007   | 7/20/2010  | 11/828724          | US | Centralized Server Rack Management Using USB                                                                                                                            |
| 82245164     | Granted     | 8347070       | 10/30/2008  | 1/1/2013   | 12/261926          | US | SYSTEM AND METHOD FOR SHARING PLATFORM DATA                                                                                                                             |
| 82260584     | Granted     | 8151147       | 12/17/2009  | 4/3/2012   | 12/640971          | US | SYNCHRONIZE ERROR HANDLING FOR A PLURALITY OF PARTITIONS                                                                                                                |
| 82260647     | Granted     | 8122290       | 12/17/2009  | 2/21/2012  | 12/641103          | US | ERROR LOG CONSOLIDATION                                                                                                                                                 |
| 82938261     | Published   |               | 11/30/2009  |            | 13/386681          | US | SYSTEM AND METHOD OF BOOTING A COMPUTER SYSTEM USING AN EFI PERSONALITY OF A DIFFERENT COMPUTER SYSTEM                                                                  |
| 83139188     | Application |               | 1/28/2013   |            | 13/751886          | US | THINNING OPERATING SYSTEMS                                                                                                                                              |
| 83171568     | Published   |               | 1/20/2013   |            | 13/745820          | US | UPDATING NON-APPENDABLE RECORD                                                                                                                                          |
| 83205242     | Published   |               | 3/22/2013   |            | 13/849271          | US | ENTITIES WITH BIOMETRICALLY DERIVED KEYS                                                                                                                                |
| 83205262     | Published   |               | 8/30/2013   |            | 14/015758          | US | MEMORY MODULE ERRORS                                                                                                                                                    |
| 83974775     | Application |               | 1/30/2012   |            | 14/370058          | US | PROVIDING NETWORK ATTACHED STORAGE DEVICES TO MANAGEMENT SUB-SYSTEMS                                                                                                    |
| 84084135     | Published   |               | 4/25/2012   |            | 14/396383          | US | DYNAMIC MEMORY ALLOCATION                                                                                                                                               |
| 84292954     | Application |               | 1/31/2013   |            | 14/764210          | US | RAM REFRESH RATE                                                                                                                                                        |
| 82250783     | Published   |               | 7/30/2009   |            | 12/462186          | US | Generating A Visualization Of Reviews According To Distance Associations Between Attributes And Opinion Words In The Reviews                                            |
| 82836850     | Granted     | 8700674       | 7/14/2009   | 4/15/2014  | 12/502890          | US | DATABASE STORAGE ARCHITECTURE                                                                                                                                           |
| 83019400     | Granted     | 8312027       | 6/5/2012    | 11/13/2012 | 13/489094          | US | MODULAR QUERY OPTIMIZER                                                                                                                                                 |
| 83566678     | Application |               | 8/15/2013   |            | 13/968278          | US | MANAGING DATABASE NODES                                                                                                                                                 |
| 84079598     | Published   |               | 5/15/2012   |            | 14/398229          | US | QUERY PROCESSING                                                                                                                                                        |
| 82062989     | Granted     | 7370077       | 11/21/2001  | 5/6/2008   | 09/989111          | US | Dynamic Generation Of A Networked Information Resource                                                                                                                  |

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| 82253717     | Published |               | 8/13/2008   |            | 12/191046          | US | INTEGRATED DEVELOPMENT ENGINE FOR A CLOUD COMPUTING ENVIRONMENT                           |
| 82257587     | Granted   | 8239553       | 4/24/2008   | 8/7/2012   | 12/109208          | US | Providing Services For Multiple Business Consumers                                        |
| 82263959     | Granted   | 8340429       | 11/24/2010  | 12/25/2012 | 12/953460          | US | SEARCHING DOCUMENT IMAGES                                                                 |
| 82947667     | Granted   | 8527436       | 8/30/2010   | 9/3/2013   | 12/871879          | US | AUTOMATED PARSING OF E-MAIL MESSAGES                                                      |
| 82948105     | Granted   | 8107015       | 6/6/1997    | 1/31/2012  | 08/870836          | US | KEY FRAME SELECTION                                                                       |
| 82948125     | Granted   | 6877134       | 7/8/1999    | 4/5/2005   | 09/363974          | US | INTEGRATED DATA AND REAL-TIME METADATA CAPTURE SYSTEM AND METHOD                          |
| 82948131     | Granted   | 7403224       | 9/10/2004   | 7/22/2008  | 10/939216          | US | EMBEDDED METADATA ENGINES IN DIGITAL CAPTURE DEVICES                                      |
| 82948148     | Published |               | 8/21/2007   |            | 11/842711          | US | NETWORK VIDEO GUIDE AND SPIDERING                                                         |
| 82948311     | Granted   | 5855020       | 2/21/1996   | 12/29/1998 | 08/604584          | US | IMPROVED WED SCAN PROCESS                                                                 |
| 82948623     | Granted   | 8918366       | 10/2/2006   | 12/23/2014 | 11/541996          | US | SYNTHETIC FULL COPIES OF DATA AND DYNAMIC BULK-TO-BRICK TRANSFORMATION                    |
| 82948626     | Granted   | 8543542       | 10/2/2006   | 9/24/2013  | 11/541856          | US | SYNTHETIC FULL COPIES OF DATA AND DYNAMIC BULK-TO-BRICK TRANSFORMATION                    |
| 82948629     | Granted   | 8935214       | 8/16/2010   | 1/13/2015  | 12/856904          | US | STORING ELECTRONIC CONTENT WITH TIME-VARYING PROPERTIES                                   |
| 82962552     | Granted   | 8984404       | 5/21/2012   | 3/17/2015  | 13/476358          | US | GUIDING AN IMAGE-BASED TASK EXECUTION                                                     |
| 82991663     | Granted   | 8387087       | 4/27/2012   | 2/26/2013  | 13/458971          | US | SYSTEM AND METHOD FOR APPLYING A DATABASE TO VIDEO MULTIMEDIA                             |
| 83174548     | Granted   | 8781817       | 3/4/2013    | 7/15/2014  | 13/784187          | US | PHRASE-BASED DOCUMENT CLUSTERING WITH AUTOMATIC PHRASE EXTRACTION                         |
| 83712065     | Published |               | 2/3/2012    |            | 14/131291          | US | SELECTOR SYNCRONIZED WITH MOVEMENT OF DATA IN MEMORY                                      |
| 83782573     | Published |               | 12/22/2011  |            | 14/232217          | US | CRYPTOGRAPHIC INFORMATION ASSOCIATION TO MEMORY REGIONS                                   |
| 83782782     | Allowed   |               | 3/30/2012   |            | 14/233334          | US | SECURE BOOT INFORMATION WITH VALIDATION CONTROL DATA SPECIFYING A VALIDATION TECHNIQUE    |
| 83784170     | Published |               | 1/31/2012   |            | 14/232224          | US | Access to Memory Region Including Confidential Information                                |
| 81947804     | Granted   | 5721865       | 1/18/1996   | 2/24/1998  | 08/588503          | US | Information Processing Equipment                                                          |
| 81974771     | Granted   | 6691210       | 12/29/2000  | 2/10/2004  | 09/751371          | US | Circuit And Method For Hardware-assisted Software Flushing Of Data And Instruction Caches |
| 81988508     | Granted   | 6964035       | 7/3/2001    | 11/8/2005  | 09/898204          | US | Debugging An Operating System Kernel With Debugger Support In A Network Interface Card    |
| 81997121     | Granted   | 6994158       | 10/15/2003  | 2/7/2006   | 10/684480          | US | Multi-Load Thermal Regulating System Having Electronic Valve Control                      |
| 81997310     | Granted   | 6687168       | 1/18/2002   | 2/3/2004   | 10/053995          | US | Method For Writing Data Bits To A Memory Array                                            |
| 81998183     | Granted   | 7836205       | 7/11/2002   | 11/16/2010 | 10/192609          | US | Method And Device For Use With A Virtual Network                                          |

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| 82020410     | Granted | 5964891       | 8/27/1997   | 10/12/1999 | 08/924416          | US | Diagnostic System For A Distributed Data Access Network                                                                                                                             |
| 82049570     | Granted | 6675262       | 6/8/2001    | 1/6/2004   | 09/877368          | US | System<br>Multi-processor Computer System With Cache-flushing<br>System Using Memory Recall                                                                                         |
| 82050626     | Granted | 6766435       | 5/31/2000   | 7/20/2004  | 09/583795          | US | Address Translation Registers In A Processor                                                                                                                                        |
| 82050629     | Granted | 6567907       | 10/19/2000  | 5/20/2003  | 09/691973          | US | Avoiding Mapping Conflicts In A Translation Look-aside Buffer                                                                                                                       |
| 82051124     | Granted | 6813705       | 1/5/2001    | 11/2/2004  | 09/755774          | US | Memory Disambiguation Scheme For Partially Redundant<br>Load Removal                                                                                                                |
| 82079225     | Granted | 7024573       | 2/5/2002    | 4/4/2006   | 10/062443          | US | Method And Apparatus For Cooling Heat Generating<br>Components                                                                                                                      |
| 82086650     | Granted | 6945058       | 5/14/2004   | 9/20/2005  | 10/845359          | US | Cooling Of Data Centers                                                                                                                                                             |
| 82088339     | Granted | 6922752       | 8/23/2002   | 7/26/2005  | 10/226111          | US | STORAGE SYSTEM USING FAST STORAGE DEVICES FOR<br>STORING REDUNDANT DATA                                                                                                             |
| 82091270     | Granted | 7073059       | 4/8/2002    | 7/4/2006   | 10/118646          | US | Secure Machine Platform That Interfaces To Operating<br>Systems And Customized Control Programs                                                                                     |
| 82106501     | Granted | 7617250       | 9/22/2003   | 11/10/2009 | 10/666577          | US | Semantic File System                                                                                                                                                                |
| 82106507     | Granted | 8311980       | 12/1/2003   | 11/13/2012 | 10/726041          | US | Namespace Consistency For A Wide-area File System                                                                                                                                   |
| 82117808     | Granted | 6725334       | 6/8/2001    | 4/20/2004  | 09/877530          | US | METHOD AND SYSTEM FOR EXCLUSIVE TWO-LEVEL CACHING<br>IN A CHIP-MULTIPROCESSOR                                                                                                       |
| 82120175     | Granted | 7389389       | 9/26/2003   | 6/17/2008  | 10/672960          | US | System And Method For Limited Fanout Daisy Chaining Of<br>Cache Invalidation Requests In A Shared-memory<br>Multiprocessor System                                                   |
| 82120181     | Granted | 6622217       | 6/11/2001   | 9/16/2003  | 09/878983          | US | CACHE COHERENCE PROTOCOL ENGINE SYSTEM AND<br>METHOD FOR PROCESSING MEMORY TRANSACTION IN<br>DISTINCT ADDRESS SUBSETS DURING INTERLEAVED TIME<br>PERIODS IN A MULTIPROCESSOR SYSTEM |
| 82134911     | Granted | 5857097       | 3/10/1997   | 1/5/1999   | 08/814190          | US | A METHOD FOR IDENTIFYING REASONS FOR DYNAMIC STALL<br>CYCLES DURING THE EXECUTION OF A PROGRAM                                                                                      |
| 82136282     | Granted | 6070009       | 11/26/1997  | 5/30/2000  | 08/980166          | US | METHOD FOR ESTIMATING EXECUTION RATES OF PROGRAM<br>EXECUTION PATHS                                                                                                                 |
| 82136285     | Granted | 6237073       | 6/28/2000   | 5/22/2001  | 08/979034          | US | METHOD FOR PROVIDING VIRTUAL MEMORY TO PHYSICAL<br>MEMORY PAGE MAPPING IN A COMPUTER OPERATING<br>SYSTEM THAT RANDOMLY SAMPLES STATE INFORMATION                                    |
| 82136408     | Granted | 6374367       | 11/26/1997  | 4/16/2002  | 08/980124          | US | APPARATUS AND METHOD FOR MONITORING A COMPUTER<br>SYSTEM TO GUIDE OPTIMIZATION                                                                                                      |
| 82172561     | Granted | 8775763       | 7/13/2007   | 7/8/2014   | 11/827973          | US | Redundant Data Assignment In A Data Storage System                                                                                                                                  |
| 82175552     | Granted | 8250107       | 6/3/2003    | 8/21/2012  | 10/454252          | US | Techniques For Graph Data Structure Management                                                                                                                                      |
| 82176242     | Granted | 7310703       | 10/23/2003  | 12/18/2007 | 10/693758          | US | Methods Of Reading And Writing Data                                                                                                                                                 |
| 82176494     | Granted | 7072739       | 5/29/2003   | 7/4/2006   | 10/446867          | US | DATA CENTER ROBOTIC DEVICE                                                                                                                                                          |

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| 82183355     | Granted | 8019477       | 5/26/2004   | 9/13/2011  | 10/853529          | US | Energy Efficient CRAC Unit Operation                                                                                                          |
| 82183421     | Granted | 7421575       | 7/16/2004   | 9/2/2008   | 10/892272          | US | Configuring A Physical Platform In A Reconfigurable Data Center                                                                               |
| 82183547     | Granted | 7673296       | 7/28/2004   | 3/2/2010   | 10/902199          | US | Method And System For Optional Code Scheduling                                                                                                |
| 82184297     | Granted | 7269753       | 8/27/2004   | 9/11/2007  | 10/927235          | US | Mapping Power System Components                                                                                                               |
| 82184354     | Granted | 8055845       | 2/3/2005    | 11/8/2011  | 11/051435          | US | Method Of Cooperative Caching For Distributed Storage System                                                                                  |
| 82184357     | Granted | 7823156       | 2/3/2005    | 10/26/2010 | 11/051436          | US | Method Of Hashing Address Space To Storage Servers                                                                                            |
| 82184669     | Granted | 8214819       | 7/9/2004    | 7/3/2012   | 10/886705          | US | Determining Call Counts In A Program                                                                                                          |
| 82190099     | Granted | 7586892       | 4/26/2004   | 9/8/2009   | 10/832487          | US | Computer Method And Apparatus For Periodic Scheduling With Jitter-approximation Tradeoff                                                      |
| 82190414     | Granted | 7549298       | 12/4/2004   | 6/23/2009  | 11/005284          | US | Spray Cooling With Spray Deflection                                                                                                           |
| 82191353     | Granted | 8095928       | 10/6/2004   | 1/10/2012  | 10/959536          | US | Method Of Forming Virtual Computer Cluster Within Shared Computing Environment                                                                |
| 82197719     | Granted | RE42195       | 11/8/2006   | 3/1/2011   | 11/594721          | US | Energy Efficient CRAC Unit Operation Using Heat Transfer Levels                                                                               |
| 82202147     | Granted | 8718301       | 10/25/2004  | 5/6/2014   | 10/973794          | US | Telescopic Spatial Radio System                                                                                                               |
| 82203272     | Granted | 7682234       | 11/1/2005   | 3/23/2010  | 11/264793          | US | Correlation Of Airflow Delivery Devices And Air Movers                                                                                        |
| 82204961     | Granted | 7644148       | 5/16/2005   | 1/5/2010   | 11/129986          | US | Historical Data Based Workload Allocation                                                                                                     |
| 82206146     | Granted | 8799891       | 3/2/2005    | 8/5/2014   | 11/070602          | US | System And Method For Attributing CPU Usage Of A Virtual Machine Monitor To A Corresponding Virtual Machine                                   |
| 82206149     | Granted | 7797707       | 3/2/2005    | 9/14/2010  | 11/070605          | US | SYSTEM AND METHOD FOR ATTRIBUTING TO A CORRESPONDING VIRTUAL MACHINE CPU USAGE OF A DOMAIN IN WHICH A SHARED RESOURCE'S DEVICE DRIVER RESIDES |
| 82207643     | Granted | 7620480       | 11/1/2005   | 11/17/2009 | 11/264786          | US | Cooling Components Across A Continuum                                                                                                         |
| 82208891     | Granted | 7880590       | 7/18/2006   | 2/1/2011   | 11/488489          | US | METHOD AND APPARATUS FOR LOCALIZATION OF CONFIGURABLE DEVICES                                                                                 |
| 82211267     | Granted | 7797704       | 3/30/2005   | 9/14/2010  | 11/094554          | US | SYSTEM AND METHOD FOR PERFORMING WORK BY ONE OF PLURAL THREADS USING A LOCKABLE RESOURCE                                                      |
| 82212641     | Granted | 7529949       | 10/26/2005  | 5/5/2009   | 11/258758          | US | Heterogeneous Power Supply Management System                                                                                                  |
| 82220252     | Granted | 7806333       | 10/18/2006  | 10/5/2010  | 11/582753          | US | TRACKING RFID TAGS WITH OVERLAPPING ANTENNAS                                                                                                  |
| 82220381     | Granted | 8179258       | 8/8/2006    | 5/15/2012  | 11/500546          | US | Method For Reading A Tag                                                                                                                      |
| 82220564     | Granted | 8098658       | 8/1/2006    | 1/17/2012  | 11/496860          | US | Power-based Networking Resource Allocation                                                                                                    |
| 82220567     | Granted | 8457121       | 8/1/2006    | 6/4/2013   | 11/496945          | US | Heterogeneous Network Switch System                                                                                                           |
| 82220570     | Granted | 8107458       | 8/1/2006    | 1/31/2012  | 11/496859          | US | Power-based Networking Path Allocation                                                                                                        |
| 82222007     | Granted | 7596431       | 10/31/2006  | 9/29/2009  | 11/590525          | US | Method For Assessing Electronic Devices                                                                                                       |
| 82229186     | Granted | 7962769       | 4/30/2007   | 6/14/2011  | 11/796942          | US | BALANCING OF RENEWABLE POWER USAGE AND WORKLOAD PERFORMANCE BETWEEN COOLING SYSTEM AND ELECTRONIC COMPONENTS                                  |

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| 82229246     | Granted     | 7743285       | 4/17/2007   | 6/22/2010  | 11/787881          | US | Chip Multiprocessor With Configurable Fault Isolation                                                                                            |
| 82230116     | Granted     | 7861102       | 4/30/2007   | 12/28/2010 | 11/796962          | US | Unified Power Management Architecture                                                                                                            |
| 82231742     | Granted     | 8327354       | 5/31/2007   | 12/4/2012  | 11/756125          | US | Virtualization With Binary Translation                                                                                                           |
| 82231991     | Application |               | 7/23/2007   |            | 11/781333          | US | Resource Utilization Based System Modeling                                                                                                       |
| 82233431     | Granted     | 7966358       | 7/20/2007   | 6/21/2011  | 11/880135          | US | Determining An Approximate Number Of Instances Of A<br>Item For An Organization                                                                  |
| 82240043     | Granted     | 8181180       | 9/14/2007   | 5/15/2012  | 11/855682          | US | Managing Jobs In Shared File Systems                                                                                                             |
| 82240046     | Application |               | 9/14/2007   |            | 11/855700          | US | Retrieving Data From Multiple Locations In Storage Systems                                                                                       |
| 82240049     | Application |               | 9/14/2007   |            | 11/855715          | US | Reducing Latency Of I/O Requests In Storage Systems                                                                                              |
| 82240175     | Granted     | 8731733       | 4/1/2008    | 5/20/2014  | 12/935904          | US | Management System Operable Under Multiple Metric Levels                                                                                          |
| 82242482     | Granted     | 8250433       | 10/1/2008   | 8/21/2012  | 12/243419          | US | Allocation Of Symbols Of An Erasure Code Across A Plurality<br>Of Devices                                                                        |
| 82245167     | Granted     | 8677375       | 1/29/2009   | 3/18/2014  | 12/362202          | US | SELECTING EXECUTING REQUESTS TO PREEMPT                                                                                                          |
| 82247039     | Published   |               | 1/5/2009    |            | 12/348832          | US | Computer-implemented Method For Role Discovery And<br>Simplification In Access Control Systems                                                   |
| 82247348     | Granted     | 9130852       | 4/27/2009   | 9/8/2015   | 12/430236          | US | Generating A Summary Of Users That Have Accessed A<br>Resource                                                                                   |
| 82249163     | Published   |               | 4/29/2009   |            | 12/432492          | US | ONTOLOGY CREATION BY REFERENCE TO A KNOWLEDGE<br>CORPUS                                                                                          |
| 82249601     | Granted     | 8452626       | 8/10/2009   | 5/28/2013  | 12/538454          | US | Technology Replacement Fost Estimation Using<br>Environmental Cost Considerations                                                                |
| 82251161     | Published   |               | 10/6/2009   |            | 12/574303          | US | ASSESSING AN ENVIRONMENTAL FOOTPRINT OF AN OBJECT                                                                                                |
| 82257965     | Granted     | 8683477       | 7/5/2009    | 3/25/2014  | 12/497676          | US | Performance Degradation Based At Least On Computing<br>Application Priority And In A Relative Manner That Is Known<br>And Predictable Beforehand |
| 82258277     | Published   |               | 11/25/2009  |            | 12/625780          | US | Business Services Risk Management                                                                                                                |
| 82258340     | Granted     | 8966195       | 6/26/2009   | 2/24/2015  | 12/492537          | US | Direct Memory Access And Super Page Swapping<br>Optimizations For A Memory Blade                                                                 |
| 82259210     | Granted     | 8908912       | 9/24/2009   | 12/9/2014  | 13/258476          | US | Particle Tracking Methods                                                                                                                        |
| 82261088     | Published   |               | 6/11/2010   |            | 12/813635          | US | Computing Cluster Performance Simulation Using A Genetic<br>Algorithm Solution                                                                   |
| 82261211     | Granted     | 8359463       | 5/26/2010   | 1/22/2013  | 12/788013          | US | Selecting A Configuration For An Application                                                                                                     |
| 82262147     | Granted     | 8565931       | 10/27/2010  | 10/22/2013 | 12/913368          | US | MANAGING ENERGY DEMAND IN AN INFRASTRUCTURE                                                                                                      |
| 82262648     | Published   |               | 6/1/2010    |            | 12/791263          | US | Changing A Number Of Disk Agents To Backup Objects To A<br>Storage Device                                                                        |
| 82262831     | Granted     | 8838423       | 10/29/2010  | 9/16/2014  | 12/915212          | US | MANAGING AN INFRASTRUCTURE                                                                                                                       |

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| 82265084     | Published |               | 1/27/2011   |            | 13/015501          | US | DETERMINING AN ENTITY'S SHARE OF ECONOMIC CONTRIBUTION AND ENVIRONMENTAL BURDEN |
| 82467402     | Granted   | 8626693       | 1/14/2011   | 1/7/2014   | 13/007270          | US | Node similarity for component substitution                                      |
| 82467840     | Granted   | 8641804       | 7/29/2011   | 2/4/2014   | 13/194123          | US | SYSTEMS AND METHODS TO CONDITION AIR                                            |
| 82618428     | Published |               | 8/23/2011   |            | 13/215830          | US | Data Sharing Methods and Data Sharing Systems                                   |
| 82654469     | Granted   | 8677365       | 8/27/2008   | 3/18/2014  | 13/061004          | US | Performing Zone Based Workload Scheduling According To Environmental Conditions |
| 82747739     | Granted   | 8918566       | 1/23/2009   | 12/23/2014 | 13/130836          | US | System And Methods For Allocating Shared Storage Resources                      |
| 82756401     | Granted   | 8405530       | 8/17/2011   | 3/26/2013  | 13/211695          | US | ENCODING DATA BASED ON WEIGHT CONSTRAINTS                                       |
| 82775047     | Published |               | 10/31/2011  |            | 13/285755          | US | Server Replication and Transaction Commitment                                   |
| 82816544     | Granted   | 8560940       | 8/29/2011   | 10/15/2013 | 13/220351          | US | Detect Repeat Patterns On Web Page                                              |
| 82833813     | Published |               | 10/26/2011  |            | 13/282390          | US | MANAGING MULTIPLE COOLING SYSTEMS IN A FACILITY                                 |
| 82853272     | Granted   | 8707098       | 1/14/2010   | 4/22/2014  | 13/259221          | US | Recovery Procedure For A Data Storage System                                    |
| 82854022     | Granted   | 8212230       | 9/25/2011   | 7/3/2012   | 13/244514          | US | Integrated Circuits With Phase Change Devices                                   |
| 82923425     | Published |               | 2/13/2010   |            | 13/383592          | US | SYSTEM AND METHOD FOR IDENTIFYING THE PRINCIPAL DOCUMENTS IN A DOCUMENT SET     |
| 82923485     | Granted   |               |             |            |                    |    | REFRESHING MEMRISTIVE SYSTEMS                                                   |
| 82924195     | Granted   | 8675391       | 4/19/2010   | 3/18/2014  | 13/383599          | US | CODING FOR CROSSBAR ARCHITECTURE                                                |
| 82925171     | Published | 9142287       | 3/12/2010   | 9/22/2015  | 13/383644          | US | USING A FINANCIAL INSTITUTION BASED ACCOUNT FOR ULTRA-LOW LATENCY TRANSACTIONS  |
| 82963425     | Published |               | 4/30/2012   |            | 13/460806          | US | Multi-Geography Cloud Storage                                                   |
| 82990999     | Published |               | 7/9/2012    |            | 13/544575          | US | Storing Data Structures in Cache                                                |
| 82991019     | Published |               | 6/22/2012   |            | 13/531075          | US | Recommending Options Based on Sustainability Metrics                            |
| 83038802     | Published |               | 7/30/2012   |            | 13/561217          | US | JOB PLACEMENT BASED ON MODELING OF JOB SLOTS                                    |
| 83139311     | Published |               | 1/31/2013   |            | 13/755332          | US | REDUCING BANDWIDTH USAGE OF A MOBILE CLIENT                                     |
| 83164704     | Published |               | 7/30/2010   |            | 13/812104          | US | Method For Selecting User Desirable Content From Web Pages                      |
| 83618019     | Published |               | 8/30/2013   |            | 14/014834          | US | GENERATING A DEMAND RESPONSE FOR AN ENERGY-CONSUMING FACILITY                   |
| 83991320     | Published |               | 3/2/2012    |            | 14/374812          | US | VERSIONED MEMORIES USING A MULTI-LEVEL CELL                                     |
| 83991575     | Published |               | 4/27/2012   |            | 14/374817          | US | LOCAL CHECKPOINTING USING A MULTI-LEVEL CELL                                    |
| 84101327     | Published |               | 5/25/2012   |            | 14/403386          | US | PROVIDING A MODEL OF IMPACT OF A COOLING INFRASTRUCTURE                         |
| 84114792     | Published |               | 12/9/2014   |            | 14/564215          | US | Interface Methods And Apparatus For Memory Devices                              |
| 84140136     | Published |               | 10/31/2012  |            | 14/417236          | US | Combined Block-Style Error Correction                                           |
| 84140159     | Published |               | 10/30/2012  |            | 14/417220          | US | SMART MEMORY BUFFERS                                                            |
| 84217909     | Published |               | 10/19/2012  |            | 14/436048          | US | ASYNCRHONOUS CONSISTENT SNAPSHOTS IN PERSISTENT MEMORY STORES                   |

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| 84301132     | Application |               | 1/31/2013   |            | 14/764673          | US | ADAPTIVE GRANULARITY ROW- BUFFER CACHE                                                                |
| 84304461     | Application |               | 1/31/2013   |            | 14/764135          | US | NON-VOLATILE MULTI-LEVEL-CELL MEMORY WITH DECOUPLED BITS FOR HIGHER PERFORMANCE AND ENERGY EFFICIENCY |
| 84304478     | Application |               | 1/31/2013   |            | 14/764214          | US | SELECTING CIRCUITS OF A MULTI-LEVEL INTEGRATED CIRCUIT                                                |
| 84306273     | Application |               | 3/20/2013   |            | 14/764651          | US | CACHING DATA IN A MEMORY SYSTEM HAVING MEMORY NODES AT DIFFERENT HIERARCHICAL LEVELS                  |
| 90052809     | Application |               | 3/14/2013   |            | 14/774521          | US | MULTIVERSIONED NONVOLATILE MEMORY HIERARCHY FOR PERSISTENT MEMORY                                     |
| 83137777     | Application |               | 1/31/2013   |            | 13/755431          | US | ASSET CHARACTERISTIC TRANSFORMATION USING TRANSFORM DISTRIBUTIONS                                     |
| 82098947     | Granted     | 7400996       | 6/26/2003   | 7/15/2008  | 10/606463          | US | Use Of I2c-based Potentiometers To Enable Voltage Rail Variation Under BMC Control                    |
| 82103570     | Granted     | 7825538       | 2/11/2004   | 11/2/2010  | 10/777505          | US | Power Distribution System Utilizing Redundant AC Sources Or DC Sources                                |
| 82103696     | Granted     | 7436950       | 7/2/2003    | 10/14/2008 | 10/612523          | US | APPARATUS AND METHOD FOR REAL-TIME POWER DISTRIBUTION MANAGEMENT                                      |
| 82120676     | Granted     | 6784531       | 6/13/2002   | 8/31/2004  | 10/170613          | US | POWER DISTRIBUTION PLANE LAYOUT FOR VLSI PACKAGES                                                     |
| 82130663     | Granted     | 6252177       | 2/18/1998   | 6/26/2001  | 09/025670          | US | LOW INDUCTANCE CAPACITOR MOUNTING STRUCTURE FOR CAPACITORS OF A PRINTED CIRCUIT BOARD                 |
| 82173806     | Granted     | 7082042       | 12/16/2003  | 7/25/2006  | 10/737045          | US | System And Method For Power Distribution                                                              |
| 82220378     | Granted     | 7443055       | 10/24/2006  | 10/28/2008 | 11/585545          | US | Systems And Methods For Providing Redundant Voltage Regulation                                        |
| 82229936     | Granted     | 7890742       | 4/23/2007   | 2/15/2011  | 11/789163          | US | AUTOMATICALLY SELECTING FIRMWARE INSTRUCTIONS FOR AN OPERATING SYSTEM                                 |
| 82829628     | Granted     | 8225122       | 8/29/2011   | 7/17/2012  | 13/220432          | US | Method Of Determining Computing Module's Power Requirements                                           |
| 84086382     | Application |               | 4/23/2012   |            | 14/396378          | US | MODERATING A CHARGING                                                                                 |
| 84291325     | Application |               | 1/21/2013   |            | 14/760706          | US | POWER FACTOR CORRECTOR POWER SHARING                                                                  |
| 82100510     | Granted     | 6922337       | 4/30/2003   | 7/26/2005  | 10/427226          | US | Circuit Card Divider To Facilitate Thermal Management In An Electronic System                         |
| 82130918     | Granted     | 6101459       | 8/15/1997   | 8/8/2000   | 08/912293          | US | SYSTEM AND ASSOCIATED METHOD FOR COOLING COMPONENTS WITHIN A COMPUTER SYSTEM                          |
| 82131416     | Granted     | 5986882       | 10/16/1997  | 11/16/1999 | 08/951932          | US | COMPUTER SERVER APPARATUS HAVING REMOVABLE PROCESSOR/HEAT PIPE COOLING DEVICE MODULES THEREIN         |
| 82136159     | Granted     | 6286109       | 6/30/1998   | 9/4/2001   | 09/107648          | US | METHOD AND APPARATUS FOR REDUCING HEAT GENERATION IN A PORTABLE COMPUTER                              |
| 82172180     | Granted     | 6956344       | 10/31/2003  | 10/18/2005 | 10/698904          | US | High Availability Fan System                                                                          |

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| 82174304     | Granted     | 7408772       | 5/14/2004   | 8/5/2008   | 10/846031          | US | Fan Tray For Electronics Enclosure                                                                |
| 82175120     | Granted     | 7280358       | 4/19/2004   | 10/9/2007  | 10/827801          | US | Liquid Loop With Multiple Heat Exchangers For Efficient Space Utilization                         |
| 82179548     | Granted     | 7289328       | 12/21/2004  | 10/30/2007 | 11/021500          | US | Multi-chip Module With Power System And Pass-thru Holes                                           |
| 82182488     | Granted     | 7764184       | 12/22/2004  | 7/27/2010  | 11/022594          | US | Apparatus And System For Monitoring Environmental Factors In A Computer System                    |
| 82191971     | Granted     | 7434743       | 1/28/2005   | 10/14/2008 | 11/045249          | US | Reversible Fan Of Electronic Module                                                               |
| 82194659     | Granted     | 7548421       | 10/25/2005  | 6/16/2009  | 11/259544          | US | Impingement Cooling Of Components In An Electronic System                                         |
| 82203959     | Granted     | 7660110       | 9/16/2008   | 2/9/2010   | 12/211670          | US | Computer System With Motor Cooler                                                                 |
| 82209644     | Granted     | 7920384       | 8/9/2005    | 4/5/2011   | 11/199845          | US | Fan Cage For Computer Systems                                                                     |
| 82218383     | Granted     | 7379297       | 10/25/2006  | 5/27/2008  | 11/586300          | US | Air Flow Regulation Devices                                                                       |
| 82229867     | Granted     | 8462508       | 4/30/2007   | 6/11/2013  | 11/742540          | US | HEAT SINK WITH SURFACE-FORMED VAPOR CHAMBER BASE                                                  |
| 82231370     | Granted     | 7945743       | 4/30/2007   | 5/17/2011  | 11/742094          | US | DYNAMIC STORAGE BASED ON PERFORMANCE THROTTLING                                                   |
| 82237676     | Granted     | 7660115       | 5/5/2008    | 2/9/2010   | 12/115266          | US | FAN DOCKING COLLAR                                                                                |
| 82238297     | Granted     | 8042995       | 6/6/2008    | 10/25/2011 | 12/155606          | US | Method For Monitoring Temperature Of Computer Components To Determine Ambient Chassis Temperature |
| 82250909     | Granted     | 8179071       | 10/28/2009  | 5/15/2012  | 12/607812          | US | System And Method For Cooling Using Counter-rotating Fans                                         |
| 82901596     | Published   |               | 1/11/2012   |            | 13/347958          | US | ADIABATIC COOLING UNIT                                                                            |
| 82901719     | Granted     | 8649171       | 2/26/2010   | 2/11/2014  | 13/387175          | US | MIXED-FLOW DUCTED FAN                                                                             |
| 83123207     | Granted     | 9057378       | 10/17/2012  | 6/16/2015  | 13/653709          | US | Intelligent Air Moving Apparatus                                                                  |
| 84310907     | Application |               | 7/13/2015   |            | 14/797,708         | US | DATA CENTER CANOPY INCLUDING TURNING VANES                                                        |
| 84009634     | Application |               | 7/30/2014   |            | 14/447600          | US | SELECTION OF A FRAME FOR AUTHENTICATION                                                           |
| 83205182     | Published   |               | 3/26/2013   |            | 13/850865          | US | EVENT NOTIFICATIONS BASED ON LEARNED TRAVELING TIMES BETWEEN LOCATIONS                            |
| 84299280     | Application |               | 4/29/2013   |            | 14/759711          | US | RECORDING UNSTRUCTURED EVENTS IN CONTEXT                                                          |
| 82066427     | Granted     | 6169638       | 9/22/1997   | 1/2/2001   | 08/934762          | US | AUTOMATIC GAIN CONTROL CIRCUIT AND METHOD                                                         |
| 82173620     | Granted     | 6914778       | 6/27/2003   | 7/5/2005   | 10/608727          | US | MOUNTING PERIPHERAL DEVICES USING A MOUNTING MECHANISM                                            |

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