



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
61/385,020	09/21/2010		220	RALEP036+		

CONFIRMATION NO. 2195

21912

VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

FILING RECEIPT



OC000000043855891

Date Mailed: 10/08/2010

Receipt is acknowledged of this provisional patent application. It will not be examined for patentability and will become abandoned not later than twelve months after its filing date. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Applicant(s)

Gregory G. Raleigh, Woodside, CA;

Power of Attorney:

Michael Schallop--44319

If Required, Foreign Filing License Granted: 10/05/2010

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 61/385,020**

Projected Publication Date: None, application is not eligible for pre-grant publication

Non-Publication Request: No

Early Publication Request: No

Title

SERVICE USAGE RECONCILIATION SYSTEM OVERVIEW

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international

page 1 of 3

patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and

Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

Doc Code: **TR.PROV**

Document Description: Provisional Cover Sheet (SB16)

PTO/SB/16 (04-07)

Approved for use through 06/30/2010 OMB 0851-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Provisional Application for Patent Cover Sheet

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c)

Inventor(s)

Inventor 1

Remove

Given Name	Middle Name	Family Name	City	State	Country i
Gregory	G.	Raleigh	Woodside	CA	US

All Inventors Must Be Listed – Additional Inventor Information blocks may be generated within this form by selecting the **Add** button.

Add

Title of Invention	SERVICE USAGE RECONCILIATION SYSTEM OVERVIEW
Attorney Docket Number (if applicable)	RALEP036+

Correspondence Address

Direct all correspondence to (select one):

☒ The address corresponding to Customer Number ☐ Firm or Individual Name

Customer Number 21912

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.

☒ No.

☐ Yes, the name of the U.S. Government agency and the Government contract number are:

Entity Status

Applicant claims small entity status under 37 CFR 1.27

- ☐ Yes, applicant qualifies for small entity status under 37 CFR 1.27
- ☒ No

Warning

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Signature

Please see 37 CFR 1.4(d) for the form of the signature.

Signature	/Michael J. Schallop/			Date (YYYY-MM-DD)	2010-09-21
First Name	Michael J.	Last Name	Schallop	Registration Number (If appropriate)	44319

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **This form can only be used when in conjunction with EFS-Web. If this form is mailed to the USPTO, it may cause delays in handling the provisional application.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that : (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to a n other federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



ItsOn, Inc.

System Scalability Document

Version 1

Contents

Flow Summary	3
Carrier RTR Records	3
ItsOn Device Usage Reports	3
OfferSet Publishing to device	4
Scalability Points	4
(1) RTR Filtering	4
Modeling Performance	4
(2) RTR Processing	4
Modeling Performance	4
(3) ItsOn Usage Reporting Gateway	4
Modeling Performance	4
(4) ItsOn Usage Report Processor	5
Modeling Performance	5
(5) uCDR Generator	5
Modeling Performance	5
(6) FTP or Publisher	5
Modeling Performance	5
(7) Fraud Analyzer	5
Modeling Performance	5
(8) ItsOn OfferSet Gateway	5
Modeling Performance	5
(9) SDC	5
Modeling Performance	5
Modeling Notes	6
ItsOn Platform Scaling Timeline	6
MSP Evaluation	6
Phase 1 Benchmarking	6
JMS Tuning	6
Scaling Network Deployment	6
Database Tuning	6
Usage Report Processor Tuning	7

RTR Scaling Benchmarks	7
ItsOn Device Client Scaling Benchmarks	7
RTR Application Tuning	7
ItsOn Application Tuning	7
RTR Network Integration with Carrier	7
Integrated Platform Benchmarks	7
Integrated Platform Tuning	7
Hardware	7
Network	8
VMware Instances	8
VMware Hosts	8
JMS Servers	9
Database Servers	9
Geo-Redundancy	9

Flow Summary

The network flow diagram can be found in ItsOn System Overview Diagram.

Carrier RTR Records

- 1) Carrier RTR connects to ItsOn RTR Filtering application
- 2) RTR Filter accepts message then determines if device is known to ItsOn
 - a. Records from unknown devices are dropped on the floor
 - b. Records from known devices are put onto JMS queue for processing
- 3) ItsOn RTR Processor takes record from JMS queue then transforms the record to store in DB for later use
 - a. DB record will be used for Fraud Analysis and uCDR generation
 - b. Record is archived in Data Warehouse

ItsOn Device Usage Reports

- 1) ItsOn client periodically connects to ItsOn Usage Reporting Gateway
- 2) Usage Reporting Gateway accepts connection from client for authentication
 - a. Gateway accepts report from authenticated clients and places report on JMS queue for processing
 - b. Client connections that fail authentication are rejected
- 3) ItsOn Usage Report Processor (EAI) takes report from JMS queue then transforms report to store in DB for later use
 - a. DB record will be used for Fraud Analysis and uCDR generation
 - b. Record is archived in Data Warehouse

OfferSet Publishing to device

- 1) SDC is utilized to create OfferSet
- 2) SDC stores OfferSet in Database backed message queue
- 3) When ItsOn client connects to Gateway for Usage Report upload, Gateway pushes OfferSet to device

Scalability Points

The lightweight and stateless design of the ItsOn Server applications allow for horizontal scaling. The server instances will be deployed in a high performance virtualized environment to support high density and rapid scaling on demand.

(1) RTR Filtering

The purpose of this application is to quickly receive and acknowledge an RTR record to provide asynchronous functionality because of the real-time processing requirements. Filtering is done to eliminate unnecessary load on the JMS queue.

Modeling Performance

The functionality of this application will be very similar to that of the ItsOn Usage Report Gateway. Our performance benchmarks of the Usage Report Gateway give us an approximation of the expected performance of this application. The measured throughput of this comparable application is **4000 TPS**. Accurate benchmark numbers will not be possible until an RTR simulator is available.

(2) RTR Processing

This application pulls the RTR records from the JMS queue, transforms the record, and stores the transformed record in the database. This is done in a single transaction in order to provide fault tolerance in case of system failure.

Modeling Performance

The functionality of this application will be very similar to that of the ItsOn Usage Report Processor (EAI.) We are confident that the benchmarks of the Usage Report Processor will be comparable to that of the RTR Processor. The current measure throughput is **110 TPS** but is expected to rise considerably after tuning.

(3) ItsOn Usage Reporting Gateway

The purpose of this application is to quickly receive and acknowledge ItsOn Client Usage Reports. This provides asynchronous functionality needed to support the real-time requirements. Authentication of the device is done before reports are put on the JMS queue.

Modeling Performance

We have recently measured throughput of **1900 TPS** on a single instance of the ItsOn Gateway. This number was achieved before any Database tuning or in-depth JMS queue tuning. Although performance of the Gateway can likely be improved upon, the Gateway will not be the initial target of performance tuning.

(4) ItsOn Usage Report Processor

This application pulls the Usage Reports from the JMS queue, transforms the report, and stores the transformed record in the database. This is done in a single transaction in order to provide fault tolerance in case of system failure.

Modeling Performance

We have recently measured throughput of **110 TPS** on a single instance of the ItsOn Usage Report Processor. This number is expected to be improved upon greatly as it will be the primary focus of optimization and tuning. The current internal goal is **400 TPS**. This target TPS will give us a very manageable scaling factor with regards to instance deployments within the ItsOn datacenter.

(5) uCDR Generator

Development needed to incorporate the RTR feeds from Carrier.

Modeling Performance

Modeling the performance will be difficult until we get more precise requirements for the outputs.

(6) FTP or Publisher

This application will be in development soon to support the RTR feeds from Carrier.

Modeling Performance

Modeling the performance will be difficult until we get more precise requirements for the outputs.

(7) Fraud Analyzer

This application will be in development soon to support the RTR feeds from Carrier.

Modeling Performance

Modeling the performance will be difficult until we get more precise requirements for the outputs.

(8) ItsOn OfferSet Gateway

This application is hit significantly less often than the Usage Reporting Gateway. It is part of the Usage Reporting Gateway so performance measurements will be included in those benchmarks.

Modeling Performance

More precise modeling will occur when the average OfferSet size is determined. Some assumptions can be made and included in current modeling. This traffic will represent **less than 1%** of overall traffic with the assumption that OfferSet are pushed at a rate of once per two weeks.

(9) SDC

This is a basic web application that will have an extremely low impact on the platform relative to the other applications. We will deploy 2 VMs in each datacenter to provide redundancy.

Modeling Performance

This web application will be easy to tune. Modeling performance will come later if at all.

Modeling Notes

The modeling spreadsheet is called ItsOn_System_Scaling_Model-v1.xlsx.

1. The number of transactions per day from the ItsOn Client used in the scaling models is a conservative estimate. The actual number is expected to be lower.
2. The network traffic flows from the device to the ItsOn servers.
3. OfferSet traffic is to the client so it is not added to overall required bandwidth.
4. JMS tuning has not begun. Overall performance will improve once JMS tuning is complete.
5. Database tuning has not begun. Overall performance will improve once database tuning is complete.
6. The VMware density number used in the model is conservative and upon tuning, density will likely be higher than this.
7. RTR Filters and Processor instances can share VMware hosts with Gateway and EAI thus increasing overall density.
8. Request for Analytics came recently. Modeling TBD.

ItsOn Platform Scaling Timeline

The Platform Scaling Timeline is in ItsOn Platform Scaling Timeline.

MSP Evaluation

ItsOn evaluated 5 Managed Services Providers and have down selected to two candidate providers.

Phase 1 Benchmarking

Application benchmarking was performed to produce inputs for the scaling models. The Usage Report Gateway and Usage Report Processor (EAI) were the focus of these benchmarks. These numbers were used to model expected performance of the RTR Filter and RTR Processor.

JMS Tuning

The JMS queue is an integral part of the ItsOn platform. It is the primary messaging system between applications and thus is required to maintain full persistence. Performance is expected to increase as the persistence back-end and network transports are optimized.

Scaling Network Deployment

ItsOn is ready to begin deployment of a scaling network sized based on either the 1 or 5 million sub model. This deployment will be used for RTR benchmarking and to exercise the ItsOn client scaling models. It will allow for a higher volume of load testing clients via cloud based services.

Database Tuning

ItsOn will be focusing on tuning Oracle to improve EAI performance as well as uCDR and Fraud analysis.

Usage Report Processor Tuning

The Usage Report Processor is known internally as EAI. It is currently the primary bottleneck between the ItsOn client and database. We are targeting 4x improvement in performance through optimization of the transaction manager that controls JMS and database communication.

RTR Scaling Benchmarks

The goal is to exercise the end-to-end performance of processing a simulated RTR feed.

ItsOn Device Client Scaling Benchmarks

ItsOn will utilize a cloud based service to perform extensive load testing using client simulation software. The goal of these benchmarks is to verify the scaling models and identify hotspots to target during the next tuning phase.

RTR Application Tuning

The RTR Filter and Processing applications will be tuned if necessary based on the findings from the benchmarks.

ItsOn Application Tuning

Any performance issues identified during the benchmarks will be targeted for optimization to improve performance of the ItsOn applications.

RTR Network Integration with Carrier

Our goal is to begin the process of integrating ItsOn scaling network with the Carrier test network to allow for scalability testing by Carrier.

Integrated Platform Benchmarks

This phase will focus on overall performance of the platform while benchmarking RTR and ItsOn client inputs and outputs concurrently. The goal is to exercise the scaling capacity of the entire platform as it would be stressed in production.

Integrated Platform Tuning

Any scalability issues identified during the benchmarks will be targeted for optimization to improve overall performance of the platform.

Hardware

Our initial scaling benchmark network will be sized to either the 1 or 5 million sub model. The 5 million sub model is detailed below.

Network

All network hardware will be deployed in an HA configuration to provide both failover redundancy and load balancing.

Element	Make and Model	Notes
Load Balancer	F5 LTM	BIGIP 3600
Firewall	Cisco ASA 5500 Series	280,000+ concurrent conns
Bandwidth	10 Mbps CIR	Burstable to 100 Mbps
Switches	Cisco Catalyst 2948	10/100/1000

VMware Instances

The number of instances for each application will be adjusted according to load observed during benchmarking. The VMware density will support these adjustments.

- 16 EAI VM instances
 1. 2x VPU
 2. 4GB VRAM
- 2 Gateway VM instances
 1. 2x VPU
 2. 4GB VRAM
- 2 RTR Filter VM instances
 1. 2x VPU
 2. 4GB VRAM
- 2 RTR Processor VM instances
 1. 2x VPU
 2. 4GB VRAM
- 2 SDC Web Server VM instances
 1. 1x VPU
 2. 2GB VRAM
- 2 SDC App Server VM instances
 1. 1x VPU
 2. 2GB VRAM
- 2 management VM instances
 1. 1x VPU
 2. 2GB VRAM

VMware Hosts

5 physical servers

- IBM x3850 X5 - Hex-Core Intel
- 48GB RAM
- SAN Storage for VM images (EMC-CX4-120)
- RHEL

JMS Servers

2 physical servers

- IBM x3650 M2 - Quad-Core Intel
- 24GB RAM
- SAN for persistence logs (EMC-CX4-120)
- RHEL 5

Database Servers

2 physical servers

- IBM x3850 - Hex-Core Intel
- 144GB RAM
- 2TB SAN storage (EMC-CX4-120)
- RHEL 5
- Oracle RAC 11g R2

Geo-Redundancy

ItsOn will deploy to geographically diverse datacenters and utilize the F5 GTM to manage active-active geo-redundancy. Oracle RAC will be configured to maintain database consistency between sites.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		SERVICE USAGE RECONCILIATION SYSTEM OVERVIEW		
First Named Inventor/Applicant Name:		Gregory G. Raleigh		
Filer:		Michael J. Schallop/Veronica Pula		
Attorney Docket Number:		RALEP036+		
Filed as Large Entity				
Provisional Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Provisional application filing	1005	1	220	220
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				220

Electronic Acknowledgement Receipt	
EFS ID:	8464034
Application Number:	61385020
International Application Number:	
Confirmation Number:	2195
Title of Invention:	SERVICE USAGE RECONCILIATION SYSTEM OVERVIEW
First Named Inventor/Applicant Name:	Gregory G. Raleigh
Customer Number:	21912
Filer:	Michael J. Schallop/Veronica Pula
Filer Authorized By:	Michael J. Schallop
Attorney Docket Number:	RALEP036+
Receipt Date:	21-SEP-2010
Filing Date:	
Time Stamp:	17:46:55
Application Type:	Provisional

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$220
RAM confirmation Number	5527
Deposit Account	500685
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)	

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Provisional Cover Sheet (SB16)	RALEP036plus_Provisional_Coversheet_Efile.pdf	1000049 37eb4cd3d6563988b9fe7f595caae34ec9494cab6	no	3
Warnings:					
Information:					
2	Specification	RALEP036plus_App.pdf	190909 eed50c2ea4d9cd24fc4da93610d47e65e9e73285	no	9
Warnings:					
Information:					
3	Drawings-only black and white line drawings	RALEP036plus_Figures.pdf	1343470 259e6ee07205c5ccfb0eae73203e0fc3561f531	no	1
Warnings:					
Information:					
4	Fee Worksheet (PTO-875)	fee-info.pdf	29488 1f0280f30579963342cd856c446c173a26ba97e6	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			2563916		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					