PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5908383

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GLOBAL INNOVATION AGGREGATORS, LLC	12/24/2019

RECEIVING PARTY DATA

Name:	K.MIZRA LLC
Street Address:	2160 CENTURY PARK EAST
Internal Address:	#707
City:	LOS ANGELES
State/Country:	CALIFORNIA
Postal Code:	90067

PROPERTY NUMBERS Total: 61

Property Type	Number
Patent Number:	7535895
Patent Number:	7970009
Patent Number:	7899916
Patent Number:	8782282
Patent Number:	8949381
Patent Number:	7609621
Patent Number:	7940652
Patent Number:	8811392
Patent Number:	9160658
Patent Number:	8588061
Patent Number:	8213311
Patent Number:	8848711
Patent Number:	8619784
Patent Number:	8018880
Patent Number:	8385355
Patent Number:	8582427
Patent Number:	8861545
Patent Number:	9264354
Patent Number:	9749249

Property Type	Number
Patent Number:	9197675
Patent Number:	9282010
Patent Number:	9413650
Patent Number:	9143463
Patent Number:	9172638
Patent Number:	9413694
Patent Number:	9444733
Patent Number:	9485176
Patent Number:	9843509
Patent Number:	9832042
Patent Number:	9680713
Patent Number:	10411999
Application Number:	15687633
Application Number:	16536103
Patent Number:	6965612
Patent Number:	7020158
Patent Number:	7613213
Patent Number:	7558287
Patent Number:	7630397
Patent Number:	8929312
Patent Number:	9219533
Patent Number:	9161304
Patent Number:	8958819
Patent Number:	9161299
Patent Number:	7395245
Patent Number:	7715564
Patent Number:	7359883
Patent Number:	7290047
Patent Number:	8521651
Patent Number:	7680808
Patent Number:	7451202
Patent Number:	7571488
Patent Number:	8073939
Patent Number:	8745751
Patent Number:	8639751
Patent Number:	8068452
Patent Number:	8483131
Patent Number:	8438448

Property Type	Number
Patent Number:	8548324
Patent Number:	8825797
Patent Number:	8731563
Patent Number:	8670331

CORRESPONDENCE DATA

Fax Number: (212)586-5095

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

Phone: 2125865800

Email: DFRIEDMAN@CTSWLAW.COM

Correspondent Name: DANIEL J. FRIEDMAN

Address Line 1: 420 LEXINGTON AVENUE

Address Line 2: SUITE 2400

Address Line 4: NEW YORK, NEW YORK 10170

NAME OF SUBMITTER:	DANIEL J. FRIEDMAN
SIGNATURE:	/Daniel J. Friedman/
DATE SIGNED:	01/13/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

source=Patent Assignment - Global Innovation to K.Mizra (00407808)#page1.tif

source=Patent Assignment - Global Innovation to K.Mizra (00407808)#page2.tif

source=Patent Assignment - Global Innovation to K.Mizra (00407808)#page3.tif

source=Patent Assignment - Global Innovation to K.Mizra (00407808)#page4.tif

DocuSign Envelope ID: FC81257A-F6D0-4296-89B4-7D6A643A611E

ASSIGNMENT OF PATENTS AND PATENT RIGHTS

This ASSIGNMENT OF PATENTS AND PATENT RIGHTS (the "Assignment") is executed, acknowledged and delivered by GLOBAL INNOVATION AGGREGATORS, LLC, a Delaware limited liability company ("Assignor").

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

For good and valuable consideration, the receipt of which is hereby acknowledged, Assignor agrees to and does hereby irrevocably sell, assign, transfer, and convey unto K.Mizra LLC, a Delaware limited liability company, with its principal place of business at 2160 Century Park East # 707, Los Angeles, CA 90067 ("Assignee"), and Assignee hereby accepts, all of Assignor's right, title, and interest (i) in and to the patents and patent rights set forth on Exhibit 1 hereto (the "Patents"), together with the goodwill associated therewith, the same to be held and enjoyed by said Assignee for its own use, and for the use of its successors, assigns, or other legal representatives to the end of the term or terms for which said Patents may be granted as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment had not been made; and (ii) in and to any and all causes of action and enforcement rights for the Patents including, without limitation, all rights to pursue damages, injunctive relief and other remedies for past and future infringement of the Patents.

This Assignment shall be binding upon and shall inure to the benefit of the parties and their respective successors and assigns.

Assignee is hereby authorized to file or record this Assignment or any other instrument in such public offices and with such governmental authorities, including, without limitation, the United States Patent and Trademark Office, as Assignee may determine from time to time for the purpose of evidencing the foregoing assignment.

This Assignment shall be governed by, and construed in accordance with, the laws of the United States in respect to patent issues and in all other respects by the laws of the State of New York, without giving effect to the conflict of laws rules thereof.

IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed as of this 24th day of December 2019.

GLOBAL INNOVATION
AGGREGATORS, LLC

DocuSigned by:
By: _____
DAAEA6F409B34F9...
Name: Brian Yates
Title: CEO

DocuSign Envelope ID: FC81257A-F6D0-4296-89B4-7D6A643A611E

EXHIBIT 1
Patents

Owner	Country	Application No.	Patent No.
Global Innovation Aggregators, LLC	United States	10/447,825	7535895
Global Innovation Aggregators, LLC	United States	10/646,340	7970009
Global Innovation Aggregators, LLC	United States	10/677,090	7899916
Global Innovation Aggregators, LLC	United States	10/742,573	8782282
Global Innovation Aggregators, LLC	United States	10/749,922	8949381
Global Innovation Aggregators, LLC	United States	10/776,460	7609621
Global Innovation Aggregators, LLC	United States	11/354,569	7940652
Global Innovation Aggregators, LLC	United States	11/486,389	8811392
Global Innovation Aggregators, LLC	United States	11/486,432	9160658
Global Innovation Aggregators, LLC	United States	11/543,727	8588061
Global Innovation Aggregators, LLC	United States	11/580,530	8213311
Global Innovation Aggregators, LLC	United States	11/890,308	8848711
Global Innovation Aggregators, LLC	United States	12/009,833	8619784
Global Innovation Aggregators, LLC	United States	12/079,413	8018880
Global Innovation Aggregators, LLC	United States	12/290,463	8385355
Global Innovation Aggregators, LLC	United States	13/038,282	8582427
Global Innovation Aggregators, LLC	United States	13/117,768	8861545
Global Innovation Aggregators, LLC	United States	14/050,067	9264354
Global Innovation Aggregators, LLC	United States	14/050,078	9749249
Global Innovation Aggregators, LLC	United States	14/055,721	9197675

DocuSign Envelope ID: FC81257A-F6D0-4296-89B4-7D6A643A611E

Global Innovation Aggregators, LLC	United States	14/269,039	9282010
Global Innovation Aggregators, LLC	United States	14/307,454	9413650
Global Innovation Aggregators, LLC	United States	14/308,436	9143463
Global Innovation Aggregators, LLC	United States	14/469,427	9172638
Global Innovation Aggregators, LLC	United States	14/835,517	9413694
Global Innovation Aggregators, LLC	United States	14/864,689	9444733
Global Innovation Aggregators, LLC	United States	14/864,843	9485176
Global Innovation Aggregators, LLC	United States	14/919,687	9843509
Global Innovation Aggregators, LLC	United States	14/991,862	9832042
Global Innovation Aggregators, LLC	United States	15/054,070	9680713
Global Innovation Aggregators, LLC	United States	15/838,014	10411999
Global Innovation Aggregators, LLC	United States	15/687,633	
Global Innovation Aggregators, LLC	United States	16/536,103	
Global Innovation Aggregators, LLC	United States	10/323,442	6965612
Global Innovation Aggregators, LLC	United States	10/900,737	7020158
Global Innovation Aggregators, LLC	United States	11/209,230	7613213
Global Innovation Aggregators, LLC	United States	11/210,135	7558287
Global Innovation Aggregators, LLC	United States	11/553,151	7630397
Global Innovation Aggregators, LLC	United States	13/396,453	8929312
Global Innovation Aggregators, LLC	United States	13/415,463	9219533
Global Innovation Aggregators, LLC	United States	13/447,864	9161304
Global Innovation Aggregators, LLC	United States	13/924,458	8958819

DocuSign Envelope ID: FC81257A-F6D0-4296-89B4-7D6A643A611E

Global Innovation Aggregators, LLC	United States	13/926,602	9161299
Global Innovation Aggregators, LLC	United States	10/161,673	7395245
Global Innovation Aggregators, LLC	United States	10/212,068	7715564
Global Innovation Aggregators, LLC	United States	10/257,353	7359883
Global Innovation Aggregators, LLC	United States	10/354,080	7290047
Global Innovation Aggregators, LLC	United States	10/542,362	8521651
Global Innovation Aggregators, LLC	United States	10/568,284	7680808
Global Innovation Aggregators, LLC	United States	10/738,302	7451202
Global Innovation Aggregators, LLC	United States	11/093,116	7571488
Global Innovation Aggregators, LLC	United States	11/892,105	8073939
Global Innovation Aggregators, LLC	United States	13/283,921	8745751
Global Innovation Aggregators, LLC	United States	13/283,939	8639751
Global Innovation Aggregators, LLC	United States	12/302,052	8068452
Global Innovation Aggregators, LLC	United States	12/666,237	8483131
Global Innovation Aggregators, LLC	United States	12/991,628	8438448
Global Innovation Aggregators, LLC	United States	13/140,085	8548324
Global Innovation Aggregators, LLC	United States	13/257,942	8825797
Global Innovation Aggregators, LLC	United States	13/375,887	8731563
Global Innovation Aggregators, LLC	United States	13/375,888	8670331

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	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	002.P056

CONFIRMATION NO. 4061

POWER OF ATTORNEY NOTICE

23623
AMIN, TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

OC000000101656802

Date Mailed: 08/14/2018

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/10/2018.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tmwilliams/

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	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	GLIA-031US-4

CONFIRMATION NO. 4061

98618
BrainSpark Associates, LLC
528 South Meadows Drive
Chandler, AZ 85224

POA ACCEPTANCE LETTER

OC000000101656840

Date Mailed: 08/14/2018

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/10/2018.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tmwilliams/

PTO/AIA/82A (07-13)
Approved for use through 01/31/2018. OMB 0651-0035
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.

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	10/742,573
Filing Date	12-19-2003
First Named Inventor	Eileen Zhou
Title	Network management system
Art Unit	2451
Examiner Name	MADAMBA, GLENFORD J
Attorney Docket Number	GLIA-031US-4

SIGNATURE of Applicant or Patent Practitioner

Signature	/Joseph J. Basista/	Date (Optional)	
Name	Joseph J. Basista	Registration Number	42301
Title (if Applicant is a juristic entity)	Attorney of Record		
Applicant Name (if Applicant is a juristic entity)	GLOBAL INNOVATION AGGREGATORS LLC.		

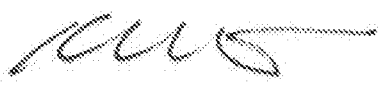
NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ *Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. 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 3 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

GENERAL POWER OF ATTORNEY

	I/WE hereby appoint the practitioners associated with the Customer Number: **98618** with the firm: BRAINSPARK ASSOCIATES, LLC 528 S. Meadows Drive Chandler, AZ 85224 United States As attorneys to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications where the assignee is named as an applicant or where the applications are assigned to the undersigned according to the USPTO assignment records or assignment documents, in which case the details will be listed on an attached form in accordance with 37 C.F.R. 3.73(c).
	Address all correspondence to: **Customer Number 98618** Direct all Telephone Calls to: 650-924-9270 Direct all Facsimiles to: 480-535-9269 Direct all emails to: info@brainsparkassociates.com
Full Name and Registered Address of Assignee	Global Innovation Aggregators, LLC 1055 E. Colorado Boulevard, Fifth Floor, Pasadena, CA 91106, USA
The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).	
Date	Dated this 13th day of February 2018
Signature of Assignee	
Printed Name of Signatory	Katherine Huen
Title of Signatory	Chief Financial Officer

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
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.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: Eileen Zhou

Application No./Patent No.: 10/742,573 Filed/Issue Date: 12-19-2003

Titled: Network management system

GLOBAL INNOVATION AGGREGATORS LLC., a Corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Inventors To: HAMMERHEAD SYSTEMS

   The document was recorded in the United States Patent and Trademark Office at
   Reel 014401, Frame 0969, or for which a copy thereof is attached.

2. From: HAMMERHEAD SYSTEMS To: BRIXHAM SOLUTIONS LTD.

   The document was recorded in the United States Patent and Trademark Office at
   Reel 023810, Frame 0916, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). 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 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
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.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: BRIXHAM SOLUTIONS LTD. To: GLOBAL INNOVATION AGGREGATORS LLC.

The document was recorded in the United States Patent and Trademark Office at
Reel 043312, Frame 0218, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Joseph J. Basista/	10 August 2018
Signature	Date
Joseph J. Basista	42301
Printed or Typed Name	Title or Registration Number

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 another 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.

Electronic Acknowledgement Receipt

EFS ID:	33440609
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	23623
Filer:	Joseph John Basista
Filer Authorized By:	
Attorney Docket Number:	002.P056
Receipt Date:	10-AUG-2018
Filing Date:	19-DEC-2003
Time Stamp:	18:52:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	GLIA-031US-4-Form82A-aia0082.pdf	174211 6c897c2ec553cc8d33435c7d1cf4e6792c82a25a	no	1

Warnings:

Information:					
2	Power of Attorney	GLIA-031US-GPOA-GlobalInnovationAggregators-executed-embedded.pdf	147238 c6c5a5ff9a4a03628aa03f4c7114bcdb295ee2f7	no	1
Warnings:					
Information:					
3	Assignee showing of ownership per 37 CFR 3.73	GLIA-031US-4-373Statement-aia0096.pdf	122366 322864f46114ce25817c6d17ff021d9579db916e	no	3
Warnings:					
Information:					
			Total Files Size (in bytes):	443815	

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.

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United States Patent and Trademark Office
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P.O. Box 1450
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www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	07/15/2014	8782282	002.P056	4061

23623 7590 06/25/2014

AMIN, TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 2172 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Eileen Zhou, San Jose, CA;
Roger Liu, San Jose, CA;
Vijoy Choyi, Santa Clara, CA;
Moshe Itah, Palo Alto, CA;
John Z. Yu, Santa Clara, CA;

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PART B - FEE(S) TRANSMITTAL

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Alexandria, Virginia 22313-1450
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CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23623 7590 02/03/2014
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127 Public Square
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CLEVELAND, OH 44114

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Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Robin Wardzala	(Depositor's name)
/Robin Wardzala/	(Signature)
May 2, 2014	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

TITLE OF INVENTION: Network management system

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	05/05/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
MADAMBA, GLENFORD J	2451	709-223000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Amin, Turocy & Watson, LLP
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: BRIXHAM SOLUTIONS LTD.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): TORTOLA, BRITISH VIRGIN ISLANDS

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☑ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☑ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☑ Payment by credit card. Form PTO-2038 is attached.
- ☑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 50-1063 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Thomas E. Watson/ Date May 2, 2014

Typed or printed name Thomas E. Watson Registration No. 43,243

Electronic Patent Application Fee Transmittal

Application Number:	10742573
Filing Date:	19-Dec-2003
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Filer:	Thomas Edward Watson/Robin Wardzala
Attorney Docket Number:	002.P056

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	960	960
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt

EFS ID:	18934318
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	23623
Filer:	Thomas Edward Watson/Robin Wardzala
Filer Authorized By:	Thomas Edward Watson
Attorney Docket Number:	002.P056
Receipt Date:	02-MAY-2014
Filing Date:	19-DEC-2003
Time Stamp:	21:34:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$960
RAM confirmation Number	7053
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Issue Fee Payment (PTO-85B)	IssueFeeTransmittal.pdf	111351 dfd4c6e949327f2a932b7fbb08e948c51065b71a	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30119 19712c1fa0c5ad939b9b6884811cd2577464608b	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	141470	

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.

New Applications Under 35 U.S.C. 111
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.

National Stage of an International Application under 35 U.S.C. 371
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New International Application Filed with the USPTO as a Receiving Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

23623 7590 03/17/2014

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57th Floor, Key Tower
CLEVELAND, OH 44114

EXAMINER	
MADAMBA, GLENFORD J	
ART UNIT	PAPER NUMBER
2451	

NOTIFICATION DATE	DELIVERY MODE
03/17/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com
hholmes@thepatentattorneys.com
swati@thepatentattorneys.com

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10/742,573	19 December, 2003	ZHOU ET AL.	002.P056

AMIN, TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

EXAMINER	
GLENFORD MADAMBA	
ART UNIT	PAPER
2451	20140310

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

This communication is being sent out to correct the Allowance Notice document dated 2/2/2014, and to correctly indicate the proper dependency of renumbered claim 10 (original claim 47) as being dependent upon renumbered claim 1 (original claim 18).

/GLENFORD MADAMBA/
Examiner, Art Unit 2451

PTO-90C (Rev.04-03)

Allowable Subject Matter

1. Original claims 1-32 are renumbered to 1-22. Claims 1-17, 19-25, 27, 29-32, 36-42, 44, 52 and 56-59 have been canceled, and new claims 60-64 have been added.

2. The Office deems Applicant's latest claim amendments persuasive to overcome the rejection of the claims over the applied prior art references and/or any other candidate prior art, and the claims are accordingly considered in condition for allowance **(MPEP § 1302.14)**.

In addition, Applicants remark and/or argument that the current prior art references do not sufficiently teach or disclose *all* of the recited limitations of the amended independent claims, and claim 1 in particular, including the recited feature of "in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance…" as recited [Remarks: par 2, pg. 9 & par 6, pg. 13], is also considered persuasive by the Office.

EXAMINER'S AMENDMENT

(*Corrected*)

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To

ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Applicant's Representative (Brian Steed, Reg. No. 64,095) on 1/8/2014. The Office also notes that as part of the interview, Applicant officially declared and stated on the record that amended claims 18, 26, 28, 62 and 63 - which respectively recite in part "wherein the gateway device is one of a plurality of gateway devices …and *is configured to* transfer...", " wherein the first application server instance *is configured to* execute...", "a first application server instance *configured to* receive…", "wherein the first adapter and the second adapter are *configured to* communicate…", and/or "wherein the load balancing component is *configured to* select…" - are *not* intended to recite a 'means (or step) plus function' limitation that invokes 35 U.S.C. 112, sixth paragraph.

3. The application has been amended as follows:

In the Claims:

Please AMEND claim 18 as follows:

18. (Currently Amended) A method, comprising:

receiving, at a first application server instance [[of]] selected from a plurality of application server instances based on a load balancing process, first adapter processed

information from a first adapter, wherein the first adapter processed information comprises event information received by the first adapter from a network element and processed by the first adapter based on a first communication protocol;

processing, by the first application server instance, ~~is configured to process~~ the first adapter processed information based on an event management service to produce application processed information;

sending, by the first application server instance, the application processed information to a gateway device, wherein the gateway device is one of a plurality of gateway devices respectively associated with the plurality of application server instances and is configured to transfer the application processed information to a second adapter of a plurality of second adapters configured to process the application processed information based on a second communication protocol to produce second adapter processed information and transfer the second adapter processed information to an operation support system device; and

in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.

Please AMEND claim 24 as follows:

24. (Canceled) ~~(Currently Amended) The method of claim 18, further comprising selecting the first application server instance is selected for receipt of the first adapter processed information based on a load balancing scheme process~~.

Please AMEND claim 26 as follows:

26. (Currently Amended) The method of claim 18, wherein the first ~~adapter~~ application server instance is configured to execute on a separate physical machine from the first ~~application server instance~~ adapter.

Please AMEND claim 28 as follows:

28. (Currently Amended) A system, comprising:

a first application server instance~~, of a plurality of application server instances,~~ configured to receive first adapter processed information from a first adapter process the first adapter processed information based on an event management service to yield application processed information, and send the application server processed information to a gateway device, wherein the first adapter processed information comprises event information from a network element that has been processed by the first adapter based on a first communication protocol; and

a load balancing component configured to select the first application server instance from a plurality of application server instances based on a load balancing process;

wherein the gateway device is one of a plurality of gateway devices respectively associated with the plurality of application server instances and is configured to transfer the application server processed information to a second adapter of a plurality of second adapters configured to process the application server processed information based on a second communication protocol to yield second adapter processed information, and send the second adapter processed information to an operation support system device, and

wherein, the first adapter and the gateway device are further configured to, in response to disablement of the first application server instance, establish an association with a second application server instance of the plurality of application server instances.

Please AMEND claim 33 as follows:

33. (Currently Amended) The method of claim [[59]] 18, further comprising converting, by the second adapter, a protocol specific message associated with the first application server instance to a formatted message associated with the second communication protocol.

Please AMEND claim 34 as follows:

34. (Currently Amended) The method of claim [[24]] 18, ~~wherein the~~ further comprising selecting the first application server instance ~~comprises selecting~~ based on a determination that

the first application server instance has a lowest processing load of the plurality of application servers instances.

Please AMEND claim 35 as follows:

35. (Currently Amended) The method of claim [[59]] 18, wherein the first communication protocol and the second communication protocol comprise one or more communication protocols associated with at least one of extensible markup language, simple network management protocol, common object request broker architecture, or transaction language 1.

Please AMEND claim 43 as follows:

43. (Currently Amended) The method of claim [[58]] 18, further comprising at least one of collecting, recording, or publishing the event information in accordance with the event management service for access by [[an]] the operation support system device.

Please AMEND claim 47 as follows:

47. (Currently Amended) ~~(Previously Presented)~~ The method of claim [[58]] 18, further comprising converting, by the first adapter, a message associated with the first communication protocol to a protocol specific message associated with the first application server instance.

Please AMEND claim 49 as follows:

49. (Currently Amended) The method of claim [[58]] 18, wherein the event information relates to a configuration of the network element.

Please AMEND claim 53 as follows:

53. (Currently Amended) The system of claim 28, ~~wherein the first adapter processed information comprises event information received at the first adapter from a network element, and~~ wherein the event information is associated with a configuration of the network element.

Please AMEND claim 56 as follows:

56. (Canceled) ~~(New) The system of claim 28, wherein the first adapter processed information comprises event information from a first network element that has been processed by the first adapter based on a first communication protocol.~~

Please AMEND claim 57 as follows:

57. (Canceled) ~~(New) The system of claim 56, wherein the plurality of second adapters are configured to process the application server processed information based on a second communication protocol to yield second adapter processed information, and send the second adapter processed information to an operation support system device.~~

Please AMEND claim 58 as follows:

58. (Canceled) ~~(New) The method of claim 18, wherein the first adapter processed information comprises event information received at the first adapter from a network element and processed by the first adapter based on a first communication protocol.~~

Please AMEND claim 59 as follows:

59. (Canceled) (New) ~~The method of claim 58, wherein the plurality of second adapters are configured to process the application processed information based on a second communication protocol to produce second adapter processed information, and transfer the second adapter processed information to an operation support system device.~~

Please ADD new claim 60 as follows:

60. (New) The system of claim 28, wherein the first communication protocol and the second communication protocol comprise one or more communication protocols associated with at least one of extensible markup language, simple network management protocol, common object request broker architecture, or transaction language 1.

Please ADD new claim 61 as follows:

61. (New) The system of claim 28, wherein at least one of the first adapter or the second adapter are executed on one or more virtual machines.

Please ADD new claim 62 as follows:

62. (New) The system of claim 28, wherein the first adapter and the second adapter are configured to communicate with the first application server instance over a remote method invocation interface.

Please ADD new claim 63 as follows:

63. (New) The system of claim 28, wherein the load balancing component is configured to select the first application server instance based on a determination that the first application server instance has a lowest processing load of the plurality of application server instances.

Please ADD new claim 64 as follows:

64. (New) The system of claim 28, wherein the plurality of gateway devices comprises a plurality of physically or logically separated gateway devices.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272- 7989. The examiner can normally be reached on Monday-Friday 7:00AM-4: 30PM, first Fridays OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, .contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Glenford Madamba/

Examiner, Art Unit 2451

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NOTICE OF ALLOWANCE AND FEE(S) DUE

23623 7590 02/03/2014

AMIN, TUROCY & WATSON, LLP
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CLEVELAND, OH 44114

EXAMINER
MADAMBA, GLENFORD J

ART UNIT	PAPER NUMBER
2451	

DATE MAILED: 02/03/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

TITLE OF INVENTION: Network management system

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	05/05/2014

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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23623 7590 02/03/2014
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57th Floor, Key Tower
CLEVELAND, OH 44114

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Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

TITLE OF INVENTION: Network management system

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	05/05/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
MADAMBA, GLENFORD J	2451	709-223000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

23623 7590 02/03/2014

AMIN, TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

EXAMINER	
MADAMBA, GLENFORD J	
ART UNIT	PAPER NUMBER
2451	

DATE MAILED: 02/03/2014

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1790 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1790 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. 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 1.14. This collection is estimated to take 12 minutes 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, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. 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.

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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.
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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 another 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.

Notice of Allowability	Application No. 10/742,573	Applicant(s) ZHOU ET AL.	
	Examiner GLENFORD MADAMBA	Art Unit 2451	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *25 September 2013*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *18, 26, 28, 33-35, 43, 45-51, 53-55 and 60-64* . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☒ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/GLENFORD MADAMBA/
Examiner, Art Unit 2451

Allowable Subject Matter

1. Original claims 1-32 are renumbered to 1-22. Claims 1-17, 19-25, 27, 29-32, 36-42, 44, 52 and 56-59 have been canceled, and new claims 60-64 have been added.

2. The Office deems Applicant's latest claim amendments persuasive to overcome the rejection of the claims over the applied prior art references and/or any other candidate prior art, and the claims are accordingly considered in condition for allowance **(MPEP § 1302.14)**.

In addition, Applicants remark and/or argument that the current prior art references do not sufficiently teach or disclose *all* of the recited limitations of the amended independent claims, and claim 1 in particular, including the recited feature of "in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance…" as recited [Remarks: par 2, pg. 9 & par 6, pg. 13], is also considered persuasive by the Office.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of

the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Applicant's Representative (Brian Steed, Reg. No. 64,095) on 1/8/2014. The Office also notes that as part of the interview, Applicant officially declared and stated on the record that amended claims 18, 26, 28, 62 and 63 - which respectively recite in part "wherein the gateway device is one of a plurality of gateway devices …and *is configured to* transfer...", " wherein the first application server instance *is configured to* execute...", "a first application server instance *configured to* receive…", "wherein the first adapter and the second adapter are *configured to* communicate…", and/or "wherein the load balancing component is *configured to* select…" - are *not* intended to recite a 'means (or step) plus function' limitation that invokes 35 U.S.C. 112, sixth paragraph.

3. The application has been amended as follows:

In the Claims:

Please AMEND claim 18 as follows:

18. (Currently Amended) A method, comprising:

receiving, at a first application server instance [[of]] selected from a plurality of application server instances based on a load balancing process, first adapter processed information from a first adapter, wherein the first adapter processed information comprises event

information received by the first adapter from a network element and processed by the first adapter based on a first communication protocol;

processing, by the first application server instance, ~~is configured to process~~ the first adapter processed information based on an event management service to produce application processed information;

sending, by the first application server instance, the application processed information to a gateway device, wherein the gateway device is one of a plurality of gateway devices respectively associated with the plurality of application server instances and is configured to transfer the application processed information to a second adapter of a plurality of second adapters configured to process the application processed information based on a second communication protocol to produce second adapter processed information and transfer the second adapter processed information to an operation support system device; and

in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.

Please AMEND claim 24 as follows:

24. (Canceled) ~~(Currently Amended) The method of claim 18, further comprising selecting the first application server instance is selected for receipt of the first adapter processed information based on a load balancing scheme process~~.

Please AMEND claim 26 as follows:

26. (Currently Amended) The method of claim 18, wherein the first ~~adapter~~ application server instance is configured to execute on a separate physical machine from the first ~~application server instance~~ adapter.

Please AMEND claim 28 as follows:

28. (Currently Amended) A system, comprising:

a first application server instance~~, of a plurality of application server instances,~~ configured to receive first adapter processed information from a first adapter process the first adapter processed information based on an event management service to yield application processed information, and send the application server processed information to a gateway device, wherein the first adapter processed information comprises event information from a network element that has been processed by the first adapter based on a first communication protocol; and

a load balancing component configured to select the first application server instance from a plurality of application server instances based on a load balancing process;

wherein the gateway device is one of a plurality of gateway devices respectively associated with the plurality of application server instances and is configured to transfer the application server processed information to a second adapter of a plurality of second adapters

configured to process the application server processed information based on a second communication protocol to yield second adapter processed information, and send the second adapter processed information to an operation support system device, and

wherein, the first adapter and the gateway device are further configured to, in response to disablement of the first application server instance, establish an association with a second application server instance of the plurality of application server instances.

Please AMEND claim 33 as follows:

33. (Currently Amended) The method of claim [[59]] 18, further comprising converting, by the second adapter, a protocol specific message associated with the first application server instance to a formatted message associated with the second communication protocol.

Please AMEND claim 34 as follows:

34. (Currently Amended) The method of claim [[24]] 18, ~~wherein the~~ further comprising selecting the first application server instance ~~comprises selecting~~ based on a determination that the first application server instance has a lowest processing load of the plurality of application servers instances.

Please AMEND claim 35 as follows:

35. (Currently Amended) The method of claim [[59]] 18, wherein the first communication protocol and the second communication protocol comprise one or more communication protocols associated with at least one of extensible markup language, simple network management protocol, common object request broker architecture, or transaction language 1.

Please AMEND claim 43 as follows:

43. (Currently Amended) The method of claim [[58]] 18, further comprising at least one of collecting, recording, or publishing the event information in accordance with the event management service for access by [[an]] the operation support system device.

Please AMEND claim 49 as follows:

49. (Currently Amended) The method of claim [[58]] 18, wherein the event information relates to a configuration of the network element.

Please AMEND claim 53 as follows:

53. (Currently Amended) The system of claim 28, ~~wherein the first adapter processed information comprises event information received at the first adapter from a network element, and~~ wherein the event information is associated with a configuration of the network element.

Please AMEND claim 56 as follows:

56. (Canceled) ~~(New) The system of claim 28, wherein the first adapter processed information comprises event information from a first network element that has been processed by the first adapter based on a first communication protocol.~~

Please AMEND claim 57 as follows:

57. (Canceled) ~~(New) The system of claim 56, wherein the plurality of second adapters are configured to process the application server processed information based on a second communication protocol to yield second adapter processed information, and send the second adapter processed information to an operation support system device.~~

Please AMEND claim 58 as follows:

58. (Canceled) ~~(New) The method of claim 18, wherein the first adapter processed information comprises event information received at the first adapter from a network element and processed by the first adapter based on a first communication protocol.~~

Please AMEND claim 59 as follows:

59. (Canceled) (New) ~~The method of claim 58, wherein the plurality of second adapters are configured to process the application processed information based on a second communication protocol to produce second adapter processed information, and transfer the second adapter processed information to an operation support system device.~~

Please ADD new claim 60 as follows:

60. (New) The system of claim 28, wherein the first communication protocol and the second communication protocol comprise one or more communication protocols associated with at least one of extensible markup language, simple network management protocol, common object request broker architecture, or transaction language 1.

Please ADD new claim 61 as follows:

61. (New) The system of claim 28, wherein at least one of the first adapter or the second adapter are executed on one or more virtual machines.

Please ADD new claim 62 as follows:

62. (New) The system of claim 28, wherein the first adapter and the second adapter are configured to communicate with the first application server instance over a remote method invocation interface.

Please ADD new claim 63 as follows:

63. (New) The system of claim 28, wherein the load balancing component is configured to select the first application server instance based on a determination that the first application server instance has a lowest processing load of the plurality of application server instances.

Please ADD new claim 64 as follows:

64. (New) The system of claim 28, wherein the plurality of gateway devices comprises a plurality of physically or logically separated gateway devices.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272- 7989. The examiner can normally be reached on Monday-Friday 7:00AM-4: 30PM, first Fridays OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, .contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Glenford Madamba/

Examiner, Art Unit 2451

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	40	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$ or US-20030177240-$ or US-20120079567-$ or US-20070271547-$ or US-20030069939-$ or US-20050044197-$ or US-20040203891-$ or US-20030182459-$).did. or (US-20040221065-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$ or US-7174381-$ or US-7568222-$ or US-6907609-$ or US-7730489-$ or US-7068597-$).did.	US-PGPUB; USPAT	OR	OFF	2014/01/13 09:52
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2009/03/23 10:24

			IBM_TDB			
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S8	2	S4 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2009/03/23 11:02

			EPO; JPO; DERWENT; IBM_TDB			
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT;	OR	ON	2009/03/24 12:00

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:06
S26	106	jvm same (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08

S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13
S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load$1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load$1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28
S42	17	gateway and load$1balanc$3 with (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2010/02/26 14:37

			IBM_TDB			
S43	48	load$1balanc$3 with (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S44	31	S43 not S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S45	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.	US-PGPUB; USPAT	OR	ON	2010/08/06 12:30
S46	1	S45 and (configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S47	215	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:31
S48	40079	(configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S49	61	S47 and S48	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S50	86208	(configuration, security) near3 (management, service$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S51	61	S47 and S50	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S52	149	S47 and S50	US-PGPUB; USPAT;	OR	ON	2010/08/06 12:32

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S53	56	S52 and (first, second) near4 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S54	0	S53 and rmi adj interface	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S55	7	S53 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S56	14	S53 and (oss, corba, cluster, mib)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:35
S57	56	S53 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:38
S58	124	SNMP near5 (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S59	72	SNMP near2 (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S60	37	SNMP adj (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22

S61	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.	US-PGPUB; USPAT	OR	ON	2010/08/06 16:15
S62	8	S61 and operation$3 near3 (support, service$1)	US-PGPUB; USPAT	OR	ON	2010/08/06 16:18
S63	0	(adaptor$1,adapter$1)and event near4 handl$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S64	0	(adaptor$1,adapter$1) and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S65	1	(adaptor$1,adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S66	0	("(adaptor$1,adapter$1)").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/01/21 15:47
S67	1	(adaptor$1,adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:47
S68	26071	gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:48
S69	1973	S68 and event near3 (handling, management)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2011/01/21 15:48

			EPO; JPO; DERWENT; IBM_TDB			
S70	916	S68 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S71	7	S70 and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S72	247	S70 and trap$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:52
S73	0	"L20" and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:53
S74	2297	(pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:00
S75	1850	(pre$1selected, designated, default) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S76	1657	(pre$1selected, designated) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S77	2124	(pre$1selected, designated) near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S78	5	(pre$1selected) adj (adapter, adaptor)	US-PGPUB; USPAT;	OR	ON	2011/01/21 16:02

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S79	33	(pre$designated, pre$1assigned) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:03
S80	2379	(adapter, adaptor) and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:08
S81	354	S80 and trap$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:08
S82	2	S81 and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:09
S83	34302	nms and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:13
S84	100	S83 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S85	0	S84 and (pre$1selected, designated, default) with (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S86	0	S84 and (pre$1selected, designated, default) same (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14

S87	2	S84 and (pre$1selected, designated, default) same (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:16
S88	522	(snmp, xml) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S89	318	S88 and translat$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S90	41	(snmp, xml) near3 (adapter, adaptor) same translat$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:21
S91	23	S90 and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:22
S92	2	S91 and snmp near3 trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:28
S93	2	S91 and event same trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:34
S94	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-	US-PGPUB; USPAT	OR	ON	2011/01/25 11:35

		7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.				
S95	14	S94 and (adapter, adaptor) same (software, module$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S96	1	S94 and (adapter, adaptor) same (software near2 module$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S97	6	S94 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:30
S98	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/06/14 20:23
S99	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/06/15 16:35
S100	18	S99 and gateways	US-PGPUB; USPAT	OR	ON	2011/06/15 16:36
S101	27	(US-20020087945-$ or US-	US-PGPUB;	OR	ON	2011/06/16

		20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	USPAT			13:08
S102	4633	(selected, predetermined, default) near2 adapter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:10
S103	101	(selected, predetermined, default) near2 adapter same event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:10
S104	102	(selected, predetermined, default, preselected) near2 adapter same event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:11
S105	25	event$1 and (selected, predetermined, default, preselected) near2 adapter and load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:11
S106	0	S105 and (nms, rmi)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:12
S107	3	(selected, predetermined, default, preselected) near2 adapter$1 same load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:25
S108	11	(selected, predetermined, default, preselected) adj adapter$1 and load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2013/06/06 17:25

			EPO; JPO; DERWENT; IBM_TDB			
S109	11	S108 and adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:26
S110	31	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$ or US-20030177240-$ or US-20120079567-$ or US-20070271547-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$ or US-7174381-$).did.	US-PGPUB; USPAT	OR	OFF	2013/06/30 19:11
S111	31	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$ or US-20030177240-$ or US-20120079567-$ or US-20070271547-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$ or US-7174381-$).did.	US-PGPUB; USPAT	OR	OFF	2013/09/20 13:14
S112	16	S111 and (fails, failure, failed)	US-PGPUB; USPAT	OR	OFF	2013/09/20 13:15
S113	1	"7586222".pn.	US-PGPUB; USPAT	OR	OFF	2013/09/20 13:20
S114	1	"7568222".pn.	US-PGPUB; USPAT	OR	OFF	2013/09/20 13:21
S115	3	S111 and (adapter, adaptor) same (fails, failure, failed)	US-PGPUB; USPAT	OR	OFF	2013/09/20 13:25
S116	772	(adapter$1, adaptor$1) same (application, server) near3 instance$1	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:09
S117	216	S116 and @ad<"20031219"	US-PGPUB;	OR	OFF	2013/09/23

			USPAT			13:10
S118	346	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/09/23 13:11
S119	84	S118 and @ad<"20031219"	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:11
S120	1	S117 and S119	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:11
S121	0	S117 and (re$1assign$4, reallocat$4) near4 (adaptor, adapter)	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:13
S122	27	S117 and (re$1assign$4, reallocat$4)	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:13
S123	7	S117 and adapter same (binding, mapping) with instance$1	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:31
S124	24	S117 and instance$1 with fail$4	US-PGPUB; USPAT	OR	OFF	2013/09/23 13:39
S125	151	(second, plurality) near3 application adj server adj instance	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:39
S126	0	S125 and (first, second) near3 (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:40
S127	35	S125 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:40
S128	0	S127 and (nms, oss)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:41
S129	1	S127 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:43
S130	7	S125 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2014/01/03 01:46

			EPO; JPO; DERWENT; IBM_TDB			
S131	1	S130 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:46
S132	0	S130 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:46
S133	1	S127 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:49
S134	0	S133 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:49
S135	2280	application adj server and server adj instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:51
S136	758	S135 and application adj server adj instance	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:51
S137	436	S136 and (fails, failed, failure, failover)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:52
S138	156	S137 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:52
S139	81	S138 and gateway	US-PGPUB; USPAT;	OR	ON	2014/01/03 01:52

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S140	28	S139 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:53
S141	0	S140 and event adj management	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:53
S142	15	S136 and event adj management	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:54
S143	2	S142 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:54
S144	0	S143 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:54
S145	228	S136 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:55
S146	45	S145 and failover	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:55
S147	29	S146 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:55

S148	26	S147 and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:55
S149	18	S148 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:55
S150	758	application adj server adj instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:57
S151	10	S150 same gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:58
S152	4	S151 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:58
S153	2	S152 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:58
S154	686	S135 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:59
S155	334	S154 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 01:59
S156	226	S155 and (failure, failover, disabled)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/01/03 01:59

			DERWENT; IBM_TDB			
S157	18	S156 and event near2 management	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:00
S158	13	S157 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:00
S159	703	S135 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:03
S160	241	S159 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:04
S161	152	S160 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:04
S162	96	S161 and (failure, failover, disabled)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:04
S163	23	S162 and (rmi, cgi, nms) and event	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:04
S164	758	application adj server adj instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:11
S165	164	S164 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR;	OR	ON	2014/01/03 02:11

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S166	65	S165 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:11
S167	37	S166 and gateway	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:12
S168	28	S167 and (fails, failure, failover, disabled)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:12
S169	5412	application adj server$1 with instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:17
S170	2759	S169 and server near2 instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:18
S171	765	S170 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:18
S172	97	S171 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:18
S173	65	S172 and (fails, failure, failover, disabled)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:18
S174	61	S173 and event$1	US-PGPUB;	OR	ON	2014/01/03

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			02:18
S175	13	S173 and event$1 near3 (management, manag$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:19
S176	0	S172 and server adj instance$1 same (failover, failure, fails, disabl$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:24
S177	1165	S169 and server adj instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:24
S178	288	S177 and (@ad<"20031219" or @rlad<"20031219")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:24
S179	61	S178 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:25
S180	7	S179 and instance with (fails, failed, failure, failover)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/03 02:25
S181	5423	application adj server$1 with instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 13:55
S182	3447	S181 and server near3 instances	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/01/07 13:55

			IBM_TDB			
S183	0	S182 and load$1balan$3 and operation adj support adj system and (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 13:57
S184	4	(network, event) near2 management and server near3 instance$1 and load$1balan$3 and operation adj support adj system and (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 13:58
S185	3	S184 and @ad<"20031219"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 13:59
S186	3	S185 and (disabl$6, fail$4)with (server, instance)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 14:00
S187	3	S186 and (convert$4, conversion, translat$4, translation)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/01/07 14:11

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	4073	709/246.ccls.	US-PGPUB; USPAT; UPAD	OR	OFF	2014/01/13 10:05
L3	5281	application adj server$1 with instances	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:06
L4	46	L2 and L3	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:06
L6	0	L4 and load$1balan$3 and operation adj support adj system and (adapter$1, adaptor$1)	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:07
L8	1042624	@ad>="20021219" and @ad<="20041219"	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:08
L9	735	L3 and L8	US-PGPUB; USPAT; UPAD	OR	OFF	2014/01/13 10:08

L10	480	L9 and server near3 instances	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:09
L11	0	L10 and load$1balan$3 and operation adj support adj system and (adapter$1, adaptor$1)	US-PGPUB; USPAT; UPAD	OR	ON	2014/01/13 10:09

1/ 13/ 2014 10:48:52 AM
C:\ Users\ gmadamba\ Documents\ EAST\ Workspaces\ 10742573_2009-03-24.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES		
Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/
RCE with claim amendments and associated remarks received in response to CTFR. New grounds of rejection provided for the amended claim set and Non-final office action sent out as response.	5/12/2010	/GJM/
Claim amendments and remarks received in response to previous action, and deemed persuasive to overcome initial rejection. Updated search performed in EAST, new grounds of rejection and new non-final provided as response.	1/25/2011	/GJM/
Claim amendments and associated remarks received in response, but the amendments are still unpersuasive to overcome the current rejection as they are still taught by one or more of the applied prior art references. Rebuttal to applicant remarks provided, and Final office action sent out as response.	6/17/2011	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
RCE with claim amendments and associated remarks received in response to previous CTFR provided. Updated search in EAST done, and new grounds of rejection developed for the amended claim set, and Non-final office action sent out as response.	6/30/2013	/GJM/
Claim amendments and remarks received in response to previous non-final action provided, and the claims appear close to being in condition for allowance. An examiner-initiated interview was conducted with Applicant's rep (Brian Steed) to negotiate an Examiner's amendment to the claims and to place the claims in better condition for allowance. Authorization to perform the examiner's amendment received on 1/8/2014. Case is allowed.	1/10/2014	/GJM/

INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
709	246	1/11/2014	/GJM/

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	GLENFORD MADAMBA	2451

CPC						
Symbol					**Type**	**Version**
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			/			

CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

(Assistant Examiner)	(Date)	**Total Claims Allowed:** 22	
/GLENFORD MADAMBA/ Examiner.Art Unit 2451	01/24/2014	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	18	3a

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	GLENFORD MADAMBA	2451

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
709	246	G	0	6	F	15 / 16 (2006.01.01)						

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
709	203	246			
719	320				

(Assistant Examiner)	(Date)	Total Claims Allowed: 22	
/GLENFORD MADAMBA/ Examiner.Art Unit 2451	01/24/2014	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	18	3a

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	GLENFORD MADAMBA	2451

☒ **Claims renumbered in the same order as presented by applicant** ☐ **CPA** ☐ **T.D.** ☐ **R.1.47**

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
-	1	-	17	4	33	12	49								
-	2	1	18	5	34	13	50								
-	3	-	19	6	35	14	51								
-	4	-	20	-	36	-	52								
-	5	-	21	-	37	15	53								
-	6	-	22	-	38	16	54								
-	7	-	23	-	39	17	55								
-	8	-	24	-	40	-	56								
-	9	-	25	-	41	-	57								
-	10	2	26	-	42	-	58								
-	11	-	27	7	43	-	59								
-	12	3	28	-	44	18	60								
-	13	-	29	8	45	19	61								
-	14	-	30	9	46	20	62								
-	15	-	31	10	47	21	63								
-	16	-	32	11	48	22	64								

(Assistant Examiner)	(Date)	**Total Claims Allowed:** 22	
/GLENFORD MADAMBA/ Examiner.Art Unit 2451	01/24/2014	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	18	3a

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011	07/01/2013	01/11/2014	
-	1	✓	✓	✓	-	-	-	-	-	
-	2	✓	✓	✓	-	-	-	-	-	
-	3	✓	✓	✓	-	-	-	-	-	
-	4	✓	✓	✓	-	-	-	-	-	
-	5	✓	✓	✓	-	-	-	-	-	
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5	34			✓	✓	✓	✓	✓	=	
6	35			✓	✓	✓	✓	✓	=	
-	36			✓	-	-	-	-	-	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011	07/01/2013	01/11/2014	
-	37			✓	-	-	-	-	-	
-	38			✓	-	-	-	-	-	
-	39			✓	-	-	-	-	-	
-	40			✓	-	-	-	-	-	
-	41			✓	-	-	-	-	-	
-	42			✓	-	-	-	-	-	
7	43			✓	✓	✓	✓	✓	=	
-	44				✓	-	-	-	-	
8	45				✓	✓	✓	✓	=	
9	46				✓	✓	✓	✓	=	
10	47				✓	✓	✓	✓	=	
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15	53				✓	✓	✓	✓	=	
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-	59								-	
18	60								=	
19	61								=	
20	62								=	
21	63								=	
22	64								=	

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 10/742,573	Filing Date 12/19/2003	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

	(Column 1)	(Column 2)		
FOR	NUMBER FILED	NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

		(Column 1)		(Column 2)	(Column 3)		
	01/15/2014	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	* 14	Minus	** 22	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***2	= 0	X $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)		
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/VIOLA ROGERS/

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Date: September 25, 2013 /Robin Wardzala/
Robin Wardzala

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of:			
Applicant(s):	Eileen Zhou, *et al.*	Examiner:	Glenford J. Madamba
Serial No:	10/742,573	Art Unit:	2451
Filing Date:	December 19, 2003	Conf. No:	4061

Title: NETWORK MANAGEMENT SYSTEM

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REPLY TO OFFICE ACTION DATED JULY 5, 2013

Examiner Madamba:

Favorable reconsideration of the above-identified patent application is respectfully requested in view of the following amendments and comments.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1-17. (Cancelled)

18. (Currently Amended) A method ~~of communicating in a network management system~~, ~~including~~ comprising:

~~receiving at a first adapter an indication of an event from a first network element, the first adapter to be one of a plurality of first adapter for the network management system, wherein the first adapter is configured to process information associated with the event based on a first communication protocol to produce first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of adapters is to be preselected to handle events from different groups of network elements;~~

~~transferring the~~ receiving, at a first application server instance of a plurality of application server instances, first adapter processed information from a first adapter ~~to an application server in a server cluster according to a load-balancing scheme~~, wherein the first application server instance is configured to process the first adapter processed information based on ~~providing to the first network element a management service to include~~ an event management service to produce [[an]] application processed information;

~~receiving at a gateway~~ sending, by the first application server instance, the application processed information to a gateway device, wherein the gateway device ~~to be~~ is one of a plurality of gateway[[s]] devices respectively associated with the plurality of application server instances ~~for the network management system, each gateway of the plurality of gateways to be preselected~~ and is configured to transfer the application processed information to ~~one or more~~ a second adapter of a plurality of second adapters; and

~~transferring the application processed information to a second adapter, from among the plurality of second adapters, the second adapter configured to process the application processed information based on a second communication protocol to produce a second adapter processed information; and~~

~~transferring the second adapter processed information from the second adapter to an operation support system~~

in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.

19-23. (Cancelled)

24. (Currently Amended) The method of claim [[23]] 18, ~~wherein~~ further comprising selecting the first application server instance ~~is selected~~ for receipt of the first adapter processed information based on [[the]] a load balancing ~~scheme~~ process.

25. (Cancelled)

26. (Currently Amended) The method of claim 18, wherein the first adapter is configured to execute on a separate physical machine from the first application server instance.

27. (Cancelled)

28. (Currently Amended) A ~~network management~~ system, ~~including~~ comprising:

~~a first adapter configured to receive an indication of an event from a first network element, the first adapter to be one of a plurality of first adapters for the network management system, wherein the first adapter is configured to process the information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements;~~

[[an]] a first application server instance ~~in a server cluster~~, of a plurality of application server instances, ~~the application server~~ configured to receive [[the]] first adapter processed information from a first adapter ~~based on a load balancing scheme~~, ~~the application server also configured to~~ process the first adapter processed information based on ~~providing to the network element a management service to include~~ an event management service to ~~produce an~~ yield application processed information, and send the application server processed information to a gateway device[[;]],

~~a gateway configured to receive the application server processed information~~ wherein the gateway device ~~to be~~ is one of a plurality of gateway[[s]] devices respectively associated with the plurality of application server instances ~~for the network management system, each gateway of the plurality of gateways to be preselected~~ and is configured to transfer the application server processed information to ~~one or more~~ a second adapter of a plurality of second adapters[[;]], and

~~a second adapter from among the plurality of second adapters, gateway;~~

~~the second adapter configured to: receive the application server processed information from the gateway, process the application server processed information based on a second communication protocol to produce a second adapter processed information, and forward the second adapter processed information to an operation support system (OSS)~~

wherein, the first adapter and the gateway device are further configured to, in response to disablement of the first application server instance, establish an association with a second application server instance of the plurality of application server instances.

29-32. (Cancelled)

33. (Currently Amended) The method of claim [[18]] 59, ~~wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adapter configured to convert~~ further comprising converting, by the second adapter, a protocol specific message[[s]] associated with the first application server instance ~~into~~ to a ~~commonly~~ formatted message[[s]] associated with the second communication protocol.

34. (Currently Amended) The method of claim [[18]] 24, ~~wherein the load balancing scheme selects~~ wherein the selecting the first application server instance comprises selecting based on [[the]] a determination that the first application server instance ~~having the lightest~~ has a lowest processing load of the plurality of application servers instances ~~in the server cluster~~.

35. (Currently Amended) The method of claim [[18]] 59, wherein the first communication protocol and the second communication protocol ~~include~~ comprise one or more communication protocols associated with at least one of ~~an Extended Markup Language (XML)~~ extensible markup language, ~~Simple Network management Protocol (SNMP)~~ simple network management protocol, ~~Common Object Request Broker Architecture (CORBA)~~ common object request broker architecture, or ~~Transaction Language 1 (TL1)~~ transaction language 1.

36-42. (Cancelled)

43. (Currently Amended) The method of clam [[18]] 58, ~~wherein the event management service comprises~~ further comprising at least one of collecting, recording, or publishing the event information in accordance with the event management service for [[use]] access by [[the]] an operation support system device ~~to manage the network element~~.

44. (Cancelled)

45. (Currently Amended) The method of claim 18 wherein the plurality of gateway[[s]] devices ~~for the network management system~~ comprise a plurality of physically or logically separated gateway[[s]] devices.

46. (Currently Amended) The method of claim 18, wherein the gateway device is a physically and logically separate machine from the first application server instance.

47. (Currently Amended) The method of claim [[18]] 58, ~~wherein the first adapter configured to process information associated with the event based on the first communication protocol comprises the first adapter configured to convert commonly formatted~~ further comprising converting, by the first adapter, a message[[s]] associated with the first communication protocol ~~into~~ to a protocol specific message[[s]] associated with the first application server instance.

48. (Currently Amended) The method of claim 18, further ~~including~~ comprising processing, by the gateway device, ~~configured to process common~~ a function[[s]] associated with the application server processed information.

49. (Currently Amended) The method of claim [[18]] 58, wherein ~~the indication of~~ the event information ~~from the network element is associated with~~ relates to a configuration of the network element.

50. (Currently Amended) The method of claim 18, ~~wherein~~ further comprising executing the first adapter and the second adapter ~~are software modules that are configured to run on Java~~ on one or more virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first adapter and the second adapter are configured to communicate with the first application server instance over [[an]] a remote method invocation [[RMI]] interface.

52. (Cancelled)

53 (Currently Amended) The system of claim 28, wherein the first adapter processed information comprises event information received at the first adapter from a network element, and wherein ~~the indication of~~ the event information ~~from the network element~~ is associated with a configuration of the network element.

54. (New) The system of claim 28, wherein the first application server instance comprises a performance manager component configured to collect performance data from a plurality of network elements respectively associated with a plurality of first adapters including the first adapter.

55. (New) The system of claim 54, wherein the performance manager component is further configured to deliver at least a subset of the performance data to one or more of the plurality of network elements.

56. (New) The system of claim 28, wherein the first adapter processed information comprises event information from a first network element that has been processed by the first adapter based on a first communication protocol.

57. (New) The system of claim 56, wherein the plurality of second adapters are configured to process the application server processed information based on a second communication protocol to yield second adapter processed information, and send the second adapter processed information to an operation support system device.

58. (New) The method of claim 18, wherein the first adapter processed information comprises event information received at the first adapter from a network element and processed by the first adapter based on a first communication protocol.

59. (New) The method of claim 58, wherein the plurality of second adapters are configured to process the application processed information based on a second communication protocol to produce second adapter processed information, and transfer the second adapter processed information to an operation support system device.

REMARKS

Upon entry of the amendments herein, claims 18, 24, 26, 28, 33-35, 43, 45-51, and 53-59 will be pending in the subject application and under consideration. Claims 18, 24, 26, 28, 33-35, 43, 45-51, and 53 have been amended, claims 23 and 52 have been cancelled, and new claims 54-59 have been added as shown on pages 2-7 of the Reply. No new matter has been added.

Assignee's representative thanks Examiner Madamba for the courtesies extended during the telephonic interview conducted on September 20, 2013. During the discussion, the participants reviewed amended independent claim 1, and assignee's representative indicated supporting figures and disclosure in the specification for certain features set forth in the that claim. The Examiner indicated that the amended claims would be reviewed in light of the discussion upon receipt of the Reply, and that assignee's representative would be contacted by phone if necessary to discuss any concerns that may remain after review.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 18-21, 23, 26, 28, 33, 35, 44-49, 51, 52, and 53 under 35 U.S.C. § 103(a)

Claims 18-21, 23, 26, 28, 33, 35, 44-49, 51, 52, and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich, *et al.* (U.S. 7,111,077) in view of Pagé, *et al.* (U.S. 5,812,768), Levesque, *et al.* (US 2004/01407277 A1), Li, *et al.* (US 2005/0108387 A1), and Gulko, *et al.* (US 2003/0177240 A1). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Starkovich, *et al.*, Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, and Gulko, *et al.*, individually or in combination, do not disclose or suggest all aspects set forth in the subject claims.

> To reject claims in an application under § 103, an examiner must establish a prima facie case of obviousness. A prima facie case of obviousness is established by a showing of three basic criteria. First, there must be some apparent reason to combine the known elements in the fashion claimed by the patent at issue (*e.g.*, in the references themselves, interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, or in the knowledge generally available to one of ordinary skill in the art). To facilitate review, this analysis should be made explicit. Second, there must be a reasonable

> expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 706.02(j). See also KSR Int'l Co. v. Teleflex, Inc., 550 U.S. 398, 04-1350, slip op. at 14 (2007). The reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

The present application relates generally to a scalable and robust network management system (NMS). In one or more embodiments, the network management system includes a northbound (NB) gateway, which includes various NB adapters, to facilitate transferring and translating information between the NMS server, or servers in a server cluster and an operations support system (OSS) from a network administrator or carrier. The NB gateway design can be distributed so that multiple NB gateways, each of which includes a number of NB adapters, can be logically or physically distributed over different workstations. In the direction from NE to NMS (uplink), the managed network can be partitioned by configuring for each network element (NE) a southbound (SB) adapter to handle information originating from that NE (see, *e.g.*, page 3, line 20 – page 4, line 10). Using this server cluster-based NMS architecture, new NMS server instances can be incrementally started and added into the server cluster without affecting existing operations. Also, when a server is shutdown, its associated software modules (NB gateway, GUI, or SB adapters) can automatically re-establish the association with another sever instance (one of existing servers or a standby server) based on certain criteria, such as selecting the lightest loaded server (see, *e.g.*, page 22, line 17 – page 21, line 8). In particular, amended independent claim 18 recites, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.*

Starkovich, *et al.* does not disclose or suggest at least these aspects. Starkovich, *et al.* relates to an apparatus for passing service requests and data from web-based work stations directly to OLTP enterprise server systems (see Starkovich, *et al.*, column 3, lines 42-46). According to Starkovich, *et al.*, a client work station is coupled, via the internet, to an NT server through a middleware product that is a generic WebTx gateway. A plurality of adapters convert each of differing request formats into a single input format for the single generic gateway. After processing, the generic gateway couples service request information to one of a plurality of

corresponding connectors for transfer to an end service provider (see Starkovich, *et al.*, column 3, lines 50-64).

Asserting that Starkovich, *et al.* discloses the gateway of independent claim 1, the Examiner indicates in particular the GGATE (element 72) described in part at column 7, lines 16-24 of that reference:

> "The adapter of DCOM server 70 converts the service request input to the standardized input utilized by GGATE 72…After processing, GGATE 72 routes the service request via the appropriate of the plurality of Connector 0 73, Connector 1 74, or Connector 2 75. The selected connector transfers the service request to End Service Provider 78, which honors the service request." (Starkovich, *et al.*, column 7, lines 16-24)

However, although the Examiner ostensibly equates the GGATE described in Starkovich, *et al.* with the gateway of the present claims, the cited reference does not contemplate *establishing an association* between this GGATE and a second application server instance *in response to a determination that a first application server instance has become disabled.* Moreover, the Office Action concedes that Starkovich, *et al.* does not disclose a first adapter as recited in independent claim 18. Consequently, the cited reference is also silent with regard to *establishing an association* between such a first adapter and a second application server instance *in response to a determination that a first application server instance has become disabled.*

Given at least these deficiencies, it is respectfully submitted that Starkovich, *et al.* fails to disclose or suggest at least, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance*, as recited in amended independent claim 1.

Pagé, *et al.* does not cure these deficiencies. Pagé, *et al.* relates to an object interface that supports three modes of inter-object communication – message processing, conversational communication, and remote procedure call. According to Pagé, *et al.*, a service broker manages service requests from, and responsive services provided by, a plurality of clients and servers,

respectively, which may reside on different hardware platforms and operating systems. Pagé, *et al.*'s broker manages the service offerings from servers and service request from clients, and clients and servers communicate and exchange information with one another via the broker (see Pagé, *et al.*, column 3, lines 28-40).

The Office Action notes in particular that Pagé, *et al.*'s broker includes a number of adapters to support interoperability between programs, as described at column 47, line 59 – column 48, line 18:

> "Client/server components that have not been written in accordance with the LAPI can be integrated through "adapters." An adapter is a software module that, at run-time, dynamically maps the "foreign" communication into the LAPI. Using different adapters, the broker supports interoperability between programs that are otherwise unable to communicate with each other. For example, this feature allows the broker to mediate requests from a client program that runs on a workstation using DDE (Dynamic Data Exchange) for communication, and to refer these requests to an appropriate server in a UNIX environment that communicates in DCE/RPC.
>
> "As shown in FIGS. 8 and 9, the adapter can be considered as a broker service that allows participants in the FSP environment to communicate with participants in non-FSP environments. For example, one adapter is for LU6.2. The adapter has fully implemented the LU6.2 verb set. Within the FSP environment, all LU6.2 commands are embedded in FSP. This allows FSP clients using LU6.2 verbs to communicate with native LU6.2 servers, and allows client that follow the LU6.2 standard to gain access to FSP servers." (Pagé, *et al.*, column 47, line 59 – column 48, line 18)

Assignee's representative disagrees with the Examiner's assertion that these adapters are similar to the first adapter recited in independent claim 18, at least because Pagé, *et al.* fails to disclose or suggest, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second*

application server instance of the plurality of application server instances and between the gateway device and the second application server instance.

Levesque, *et al.*, is also silent regarding at least these aspects. Lavesque, *et al.* relates to an element management system for remote management of telecommunications network elements (see Levesque, *et al.*, paragraph [0002]). The Examiner asserts that Lavesque, *et al.* discloses processing of event information by an application server, noting in particular the fault management features described at paragraph [0127]-[0149] of Lavesque, *et al.* However, like Starkovich, *et al.* and Pagé, *et al.*, Lavesque, *et al.* fails to disclose or suggest at least, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.*

Moreover, Li, *et al.*, which relates to an element management system that employs presence and instant messaging for communications to manage network elements in a network (see Li, *et al.*, paragraph [0002]), does not make up the deficiencies of the other cited references at least with regard to these aspects. Asserting that Li, *et al.* discloses the use of a plurality of first adapters, the Examiner notes that the element management system (EMS) described in that reference includes a number of adapters 26 for network mediation, as described at paragraphs [0021]-[0023]:

> "Ad adapter 26 is provided in the EMS for network mediation through communications stacks which provide PIM capability for the associated PIM equipped network element and standard SNMP, CORBA, TL1 and CL1 communications for non-equipped network elements, FTP/TFTP is used to transfer the large amount of performance data for both PIM equipped and non-equipped network elements.
>
> "FIG. 5 is a block diagram of structure for adaptor. In this figure, CMIP Adapter 26a is sued to translate the XML-based model to CMIP requests…and translate the CMIP Event (-M-EVENT) to the XML-based model. SNMP Adaptor 26b is used to translate the SML-based model to SNMP request…and translate the

SNMP Trap to the XML-based model. TL1 & CLI Adaptor is used to translate the XML-based model to TL1 & CLI Commands.

"The EMS is configured to know which network elements are PIM equipped or not PIM equipped allowing the EMS to select the appropriate adaptor element to communicate with the managed network elements." (Li, *et al.*, paragraphs [0021]-[0023])

However, Li, *et al.* does not contemplate *facilitating establishing an association* between the indicated adaptors *and a second application server instance in response to a determination that a first application server instance has become disabled*, and consequently fails cure the deficiencies of the other cited references at least with regard to, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance*, as recited in amended independent claim 18.

Gulko, *et al.*, which relates to a parallel computing method that makes use of a plurality of adapters that each afford a specific type of algorithm (see Gulko, *et al.*, paragraph [0015]), is also silent regarding at least these aspects.

Similarly, amended independent claim 28 recites, *the first adapter and the gateway device are further configured to, in response to disablement of the first application server instance, establish an association with a second application server instance of the plurality of application server instances*. As discussed *supra*, the cited references fail to disclose or suggest at least these aspects.

In view of at least the foregoing, it is respectfully submitted that Starkovich, *et al.*, Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, and Gulko, *et al.* individually or in combination, do not disclose or suggest all aspects set forth in amended independent claims 1 and 28 (and all claims depending therefrom), and as such fail to render obvious the present application. It is therefore requested that this rejection be withdrawn.

II. Rejection of Claim 50 under 35 U.S.C. § 103(a)

Claim 50 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Starkovich, *et al.* in view of Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, and Gulko, *et al.*, and further in view of Fenton, *et al.* (US 2004/0040030 A1). However, claim 50 depends from amended independent claim 18, and as noted above, none of Starkovich, *et al.*, Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, or Gulko, *et al.* disclose or suggest at least, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance*, as recited in that independent claim as amended.

Fenton, *et al.*, which relates to a system comprising a server that includes adapter modules for integrating a resource in a network (see Fenton, *et al.*, paragraph [0013]), is also silent regarding at least these aspects. Accordingly, withdrawal of this rejection is respectfully requested.

III. Rejection of Claims 24 and 34 under 35 U.S.C. § 103(a)

Claims 24 and 30 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Starkovich, *et al.* in view of Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, and Gulko, *et al.*, and further in view of Scheifer, *et al.* (US 2004/0249644 A1). However, claims 24 and 30 depend from amended independent claim 18. As discussed above in connection with that independent claim, Starkovich, *et al.*, Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, Gulko, *et al.*, and Fenton, *et al.* fail to disclose or suggest at least, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance.*

Scheifer, *et al.*, which relates to a decision-making data warehouse system that operates in near real-time (see Scheifer, *et al.*, paragraph [0012]), does not make up the shortcomings of the other cited references at least with regard to these aspects. Withdrawal of this rejection is therefore respectfully requested.

IV. Rejection of Claim 43 under 35 U.S.C. § 103(a)

Claim 43 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich, *et al.* in view of Pagé, *et al.*, Levesque, *et al.*, Li, *et al.*, and Gulko, *et al.*, and further in view of Upton, *et al.* (US 2003/0093403 A1). However, Upton, *et al.*, which relates to an event adapter that facilitates extraction of events from a resource (see Upton, *et al.*, paragraph [0021]), does not cure the aforementioned deficiencies of the other cited references at least with regard to, *in response to determining that the first application server instance has become disabled, facilitating establishing an association between the first adapter and a second application server instance of the plurality of application server instances and between the gateway device and the second application server instance*, as recited in amended independent claim 18. It is therefore respectfully requested that rejection be withdrawn with respect to claim 43, which depends from amended independent claim 18.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [TPHHP103US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact assignee's undersigned representative at the telephone number below.

Respectfully submitted,

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Electronic Acknowledgement Receipt

EFS ID:	16957258
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	23623
Filer:	Brian David Steed/Robin Wardzala
Filer Authorized By:	Brian David Steed
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Application Type:	Utility under 35 USC 111(a)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Reply.pdf	91485 778647981af6be02799d6d19928eb290549 3434b	yes	16

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	7
	Applicant Arguments/Remarks Made in an Amendment	8	16
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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.

National Stage of an International Application under 35 U.S.C. 371
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.

New International Application Filed with the USPTO as a Receiving Office
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.

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 10/742,573	Filing Date 12/19/2003	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **09/25/2013**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 22	Minus	** 20	= 2	X $80 =	160
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $420 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**160**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

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/MOLIKI MAY/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

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EXAMINER	
MADAMBA, GLENFORD J	
ART UNIT	PAPER NUMBER
2451	

NOTIFICATION DATE	DELIVERY MODE
07/05/2013	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/742,573	Applicant(s) ZHOU ET AL.	
	Examiner GLENFORD MADAMBA	Art Unit 2451	AIA (First Inventor to File) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2011*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *18,23,24,26,28,33-35,43 and 45-53* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *18,23,24,26,28,33-35,43 and 45-53* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some * c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to claim amendments / remarks filed by Applicant's representative on December 28, 2011.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action have been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 28, 2011 has been entered.

Response to Amendments and Remarks

1. With regards to Applicant's latest claim amendments and associated remarks filed on December 28, 2011, the Office has fully considered the claim amendments and/or remarks, but now considers them moot in light of the following *new* grounds of rejection provided with this action. With respect to the claims, and claim 18, in particular,

Applicant generally remarks that the claim has been amended to now currently specify and recite in part:

"wherein the first adapter is configured to process information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements…"

In this regard, Applicant firstly remarks that none of the currently applied prior art references (Starkovich, Pageet, Hamilton, Levesque, Li) teaches or discloses the above amended claim feature. In support of his position, Applicant remarks that while Starkovich, for example, discloses that a plurality of adapters can convert each of the differing request formats into a single input format for the single generic gateway, and that there is a different adapter for each input format employed; he does not expressly teach or suggest the amended feature of the method "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter…", as currently recited by amended claim 18.

Applicant also remarks that none of the other cited prior art references applied in the rejection, either individually or in combination, teaches or discloses the above said amended claim feature. In this regard, Applicant notes and remarks, for example, that (a) Pageet discloses “a service broker that manages service requests form, and responsive service provided by, a plurality of clients and servers, respectively”; (b) Hamilton discloses “reallocating adapters in a logically partitioned environment”, and that the adapters of server 400 are divided by logically partitioning into first virtual system 402 and second virtual system 404. If at least one of the adapters of first virtual system 402 exceeds the recipient load threshold and at least one of the adapters of second virtual system 404 is below the donor load threshold, then second virtual system 404 will be eligible to donate an adapter to first virtual system 402. By moving an adapter such as adapter 406 to first virtual system 402, adapter 406 can be donated to first virtual system 402; (c) Levesque discloses a network element management system in which network elements can be grouped, and viewed and manipulated by groups", and wherein configuration management features support easy and rapid provisioning and inventory management for both individual NEs and entire transport networks; (d) Li discloses a system for network management which incorporates Presence and Instant messaging (PIM) techniques, and which provides monitoring of servers, network elements, that an adapter 26 is provided in the EMS for network mediation through communications stacks which provide PIM capability for the associated PIM equipped network elements and standard SNMP, CORBA, TL1 and CLI communications for non-equipped network elements, that in one embodiment "the EMS is configured to know

which network elements are PIM equipped or not PIM equipped allowing the EMS to 'select the appropriate adapter element' to communicate with the managed network elements …" – however, none of Pageet, Hamilton, Levesque and/or Li teaches the amended claim feature, as recited above; nor cures or resolves the noted deficiency or weakness of Starkovich.

Applicant also remarks that dependent claims 23, 26, 33, 45-49 and 51depend directly or indirectly on amended claim 18, and are considered patentable based at least in part on their dependency. Likewise, Applicant further remarks that claims 24, 34, 43 and 50 also depend either directly or indirectly from claim 18, and that none of the additional prior art references (Shiefer, Upton and/or Fenton, respectively) teach or suggest the said amended claim feature.

However, in response to the amendment and remarks, the Office asserts that the above said amended claim feature is now expressly taught in further view of teachings or disclosures to Gulko et al, included in a new grounds of rejection below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18-21, 23, 26, 28, 33, 35, 44-49, 51-52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1 in view of Pageet et al (hereinafter Pageet), U.S. Patent 5,812,768 in view of Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1 and in further view of Li et al (hereinafter Li), U.S. Patent Publication 2005/0108387 A1 and Gulko et al (hereinafter Gulko), U.S. Patent Publication 2003/0177240 A1.

As per claims 18 and 28, Starkovich discloses particular features of the invention including the features of a method of communicating in a network management system, comprising the step of "receiving at a gateway (e.g., GGATE 72) [Figs. 2, 3 & 4] the application server processed information" (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] and "transferring the second adapter processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.] to a client" (e.g., Client 0, Client 1, …Client m) [Figs. 1-4 & 8].

But while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited features of the method including receiving at a first adapter information from a network element, the first adapter configured to process the information based on a first communication protocol; transferring the first adapter processed information to an application server; and transferring to the second adapter associated with the gateway the application server processed information, the second adapter configured to process the application server

processed information based on a second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method including "receiving at a first adapter information from a network element (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the first adapter configured to process the information based on a first communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g.,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the first adapter processed information to an application server" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]; and "transferring to the second adapter associated with the

gateway the application server processed information (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the second adapter configured to process the application server processed information based on a second communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g., Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

Further, while the combination of Starkovich and Pageet discloses substantial features of the invention as above, the combination does not explicitly disclose the additional recited features of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the first network element a management service to include an event management service to produce an application processed information", "wherein the 'information' received at a first adapter

comprises an indication of an event", and the method further comprising "transferring the second adapter processed information to an Operation Support System. Nevertheless, the said features are disclosed by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited features of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the first network element a management service to include an event management service to produce an application processed information", "wherein the 'information' received at a first adapter comprises an indication of an event" (e.g., 'Event Services') [Figure 34] (e.g., Fault Management) [0127] (e.g. Transient condition Events) [1222], and the method further comprising "transferring the second adapter processed information to an Operation Support System e.g., 'Operational Support System') [0172].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Moreover, while the combination of Starkovich, Pageet and Levesque discloses substantial features of the invention as above, including the recited feature of "wherein the gateway is one of a plurality of gateways for the network management system" (Starkovich: e.g., GGATE, XGATE,) [col 4, L34-62] (e.g., JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5], the combination does not *explicitly* disclose the additional recited feature of the "the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of the first adaptors to be preselected to handle events from different groups of network elements.." and "the gateway to be one or a plurality of gateways for the network management system, each gateway of the plurality of gateways to be *preselected* to transfer application process information to one or more of a plurality of second adapters". Nevertheless, the said feature is expressly disclosed by Li in a related endeavor.

Li discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Li discloses the additional recited feature of the method "the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of the first adaptors to be preselected to handle events from different groups of network elements..." (e.g., 'Adaptor' _26, comprising 'CMIP Adaptor' _26a, 'SNMP Adaptor' _26b and/or 'TL1 / CLI Adaptor' _26c for handling and/or processing of various 'faults' or 'events' {i.e., 'CMIP Event', 'SNMP Trap' event, configuration 'changes' and/or SNMP 'failure' / 'alarm' events}) [0022-0023] [0027] [0029] [Figs. 1, 2 and 4-6] as well as the feature of "the gateway to be one or a plurality of gateways for the network

management system, each gateway of the plurality of gateways to be preselected to transfer application process information to one or more of a plurality of second adapters" (e.g., Li discloses and illustrates as part of his invention an embodiment wherein the invention is comprising a plurality of Element Management Systems [EMS] (e.g., EMS1-3) or 'gateways', wherein each EMS is comprising a respective Adaptor module 26, and wherein each Adaptor 26 may be comprising one or more network element / vendor specific adaptors, such as CMIP Adaptor_26a, SNMP Adaptor_26b and TL1 & CLI Adaptor 26c, which is specifically selected to handle or mediate a particular CMIP, SNMP, or TL1 & CLI 'request', 'event' and/or 'command'. With reference to Fig. 4, Li expressly illustrates wherein a particular EMS is specifically selected or assigned to interface with one or more particular network element clients of a particular one or more Managed Network10a-d [Figs. 4 & 5] [0021-0022].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Li, for the motivation of providing an element management system {EMS} that employs presence and instance messaging {PIM} for communications to the managed network elements in a network using a simplified communications protocol without significantly increased system hardware and software complexity [0001 & 0009].

Last, while the combination of Starkovich, Pageet, Levesque and Li disclose substantial features of the invention as above, the combination does not explicitly disclose the additional recited feature of the method further comprising transferring first

adapter-processed information to an application server in a server cluster based on a load balancing scheme" as well as the feature of the method "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements". Nevertheless, the said features are expressly disclosed by Gulko in a related endeavor.

Gulko discloses as his invention a parallel or computing system and method that makes use of a 'plurality of adapters', wherein *each* adapter affords a 'specific type' of application processing algorithm [Abstract] [0015] [Figs. 2-2a, 3-3a & 4]. In particular, Gulko explicitly discloses the additional recited features of the method further comprising "transferring first adapter-processed information to an application server in a server cluster based on a load balancing scheme" (Gulko: e.g., 'Load Balancing Sub-Task Executer' {LOBSTER} Server) [0041] [Figs. 2 & 3], as well as the feature of "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements (Gulko: e.g., explicitly teaches and discloses in one embodiment that "the parallel computing method in accordance with the preferred embodiment of the

invention makes use of a 'plurality of adapters' *each* affording a '*specific type* of processing algorithm'. At each point in an application, *an adapter is identified* to parallelize that portion of the application. Specifically, the process involves 'associating an *appropriate* adapter' with the application portion, parsing the application portion to define tasks that may be distributed over the available computers. Combined with the parallelized program is a software server engine (Lobster), which is designed to cooperate with the adapters to control and supervise, distributed processing 'functions'. Such 'functions' include mapping, *load balancing*, and error detection and correction as well as work splitting, distribution to slave computers, and gathering and coordination of results. Also included are 'functions' that cause the *results* of the computing to be 'coordinated in a real-time' and returned appropriately, according to the application…") [0015-0016] [0041] [Fig. 2] [0044-0045] [Fig. 2a] (e.g., explicitly discloses in one aspect that the program 20 includes an 'extensible set of adapters' which cooperate with LOBSTER Server engine 22 to map out / process the algorithm specified in a particular portion 60a, 60b, or 60c of the application. Significantly, Gulko teaches that "one adapter in the set with be the most suitable {or appropriate} for a given portion, or the user can define a 'new adapter' to address specific needs of a given portion…") [0047] [0050] [0053] [Fig. 4] (e.g., '*Parallelizing an Application Using Adapters*' embodiment) [starting at 0059].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Gulko, for the motivation of providing a parallel or computing system, method and/or

architecture that permits existing and new computer programs to be converted at the algorithm level to achieve 'true parallel processing', using a plurality of adapters, and which provides the capacity to run essentially any parallel computing program on any distributed network, and which is scalable [0002] [0013-0014].

Claim 28 recites similar limitations as those recited by claim 18, is distinguishable only by its statutory category (network management system), and accordingly rejected on the same basis as the previously rejected claim.

As per claim 23, Starkovich discloses the method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element [Figs. 1-5].

As per claim 26, Starkovich discloses the method of claim 18, wherein the first adapter is on a separate physical machine from the application server [Figs. 1-5].

As per claim 33, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the method wherein the second adapter configured to process the application server processed information based on the second communication protocol comprises the second adapter configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second

communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having 'different network architectures and associated communications protocols' " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the second adapter configured to process the application server processed information based on the second communication protocol comprises the second adapter configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}] (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE protocol for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g., Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claim 35, Starkovich discloses the method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (CORBA) or Transaction Language 1 (TL1) (e.g., XML) [Abstract] (e.g., CORBA _352) [Fig. 4].

As per claim 45, Starkovich discloses the method of claim 18, wherein the plurality of gateways for the network management system comprise a plurality of physically or logically separate gateways (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 46, Starkovich discloses the method of claim 18, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application

server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claim 47, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the method wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages. However, the said feature is taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted

messages" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g., Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]..

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claim 48, Starkovich discloses the method of claim 18, further including the gateway configured to process common functions associated with the application server processed information (e.g., the gateway converts the service request to a format acceptable by an Enterprise Server) [Abstract] [Figs. 2-5, 8 & 9] (e.g., the gate interfaces with the connector and finally the service is performed on the mainframe…") (e.g., "GGate and XGate and their adapters support pass through requests…) [col 4, L8-62] [col 11, L7-16].

As per claims 49 and 53, while the combination of Starkovich and Pageet discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method "wherein the indication of the event from the network element is associated with a configuration of the network element". However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited feature of the method "wherein the information from the network element is associated with a configuration of the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Configuration Management' features to support easy and rapid provisioning and inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 51, Starkovich discloses the method of claim 18, wherein the first adapter and the second adapter are configured to communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

As per claim 52, while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element". However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additional recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element (Pageet: e.g., 'DDE Server', 'DCE Server' or 'LU.62 Server' [Fig. 8] [also Figs. 5a-b, 6 & 7g].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as

disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

2. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Levesque and in view of Li and in further view of Gulko and Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 50, while the combination of Starkovich, Pageet, Levesque, Li and Gulko discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additionally recited feature of the method wherein the first adapter and the second adapter are software modules that are configured to run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (Fenton: e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [Fenton: 0001-002].

3. Claims 24 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Levesque and in view of Li and in further view of Gulko and Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 24 and 34, while the combination of Starkovich, Pageet, Levesque, Li and Gulko discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server

according to the application server having the lightest load in the server cluster (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing') [0038]. In this regard, it would be obvious to select the server with the light load in the cluster, as is well-known in 'load-balanced' cluster networks.

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

4. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Levesque and in view of Li and in further view of Gulko and Upton et al (hereinafter Upton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 43, while the combination of Starkovich, Pageet, Levesque, Li and Gulko discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element. However, the feature is taught by Upton in a related endeavor.

Upton discloses as his invention system and method for implementing an event adapter [Abstract] [Fig. 1]. Specifically, Upton discloses the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element (Upton: e.g., 'Publish Event') [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Upton, for the motivation of providing a method and system and integration solution that is easy to use, affordable and based on industry standards, and also has universal connectivity, capable of massive scalability and has accessible business process tools [Upton: 0016] [0021].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Glenford Madamba/

Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2451

Notice of References Cited	Application/Control No. 10/742,573	Applicant(s)/Patent Under Reexamination ZHOU ET AL.	
	Examiner GLENFORD MADAMBA	Art Unit 2451	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0177240	09-2003	Gulko et al.	709/226
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011	07/01/2013		
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	3	✓	✓	✓	-	-	-	-		
	4	✓	✓	✓	-	-	-	-		
	5	✓	✓	✓	-	-	-	-		
	6	✓	✓	✓	-	-	-	-		
	7	✓	✓	✓	-	-	-	-		
	8	✓	✓	✓	-	-	-	-		
	9	✓	✓	✓	-	-	-	-		
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	34			✓	✓	✓	✓	✓		
	35			✓	✓	✓	✓	✓		
	36			✓	-	-	-	-		

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011	07/01/2013		
	37			✓	-	-	-	-		
	38			✓	-	-	-	-		
	39			✓	-	-	-	-		
	40			✓	-	-	-	-		
	41			✓	-	-	-	-		
	42			✓	-	-	-	-		
	43			✓	✓	✓	✓	✓		
	44				✓	-	-	-		
	45				✓	✓	✓	✓		
	46				✓	✓	✓	✓		
	47				✓	✓	✓	✓		
	48				✓	✓	✓	✓		
	49				✓	✓	✓	✓		
	50				✓	✓	✓	✓		
	51				✓	✓	✓	✓		
	52				✓	✓	✓	✓		
	53				✓	✓	✓	✓		

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:24
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S8	2	S4 and nms	US-PGPUB;	OR	ON	2009/03/23

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:02
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2009/03/24 11:17

			IBM_TDB			
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:00
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2009/03/24 12:06

			EPO; JPO; DERWENT; IBM_TDB			
S26	106	jvm same (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13
S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load$1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load$1balanc$3	USPAT;	OR	ON	2009/03/24

			USOCR; EPO; JPO; DERWENT			12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28
S42	17	gateway and load$1balanc$3 with (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:37
S43	48	load$1balanc$3 with (adapter$1, adaptor$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S44	31	S43 not S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S45	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$	US-PGPUB; USPAT	OR	ON	2010/08/06 12:30

		or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.				
S46	1	S45 and (configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S47	215	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:31
S48	40079	(configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S49	61	S47 and S48	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S50	86208	(configuration, security) near3 (management, service$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S51	61	S47 and S50	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S52	149	S47 and S50	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S53	56	S52 and (first, second) near4 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S54	0	S53 and rmi adj interface	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S55	7	S53 and rmi	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2010/08/06 12:33

			EPO; JPO; DERWENT; IBM_TDB			
S56	14	S53 and (oss, corba, cluster, mib)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:35
S57	56	S53 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:38
S58	124	SNMP near5 (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S59	72	SNMP near2 (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S60	37	SNMP adj (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S61	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.	US-PGPUB; USPAT	OR	ON	2010/08/06 16:15
S62	8	S61 and operation$3 near3 (support, service$1)	US-PGPUB; USPAT	OR	ON	2010/08/06 16:18
S63	0	(adaptor$1,adapter$1)and event near4 handl$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S64	0	(adaptor$1,adapter$1) and event$1	US-PGPUB;	OR	ON	2011/01/21

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:46
S65	1	(adaptor$1,adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S66	0	("(adaptor$1,adapter$1)").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/01/21 15:47
S67	1	(adaptor$1,adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:47
S68	26071	gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:48
S69	1973	S68 and event near3 (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:48
S70	916	S68 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S71	7	S70 and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S72	247	S70 and trap$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2011/01/21 15:52

			IBM_TDB			
S73	0	"L20" and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:53
S74	2297	(pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:00
S75	1850	(pre$1selected, designated, default) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S76	1657	(pre$1selected, designated) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S77	2124	(pre$1selected, designated) near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S78	5	(pre$1selected) adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:02
S79	33	(pre$designated, pre$1assigned) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:03
S80	2379	(adapter, adaptor) and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:08
S81	354	S80 and trap$1	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2011/01/21 16:08

			EPO; JPO; DERWENT; IBM_TDB			
S82	2	S81 and (pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:09
S83	34302	nms and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:13
S84	100	S83 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S85	0	S84 and (pre$1selected, designated, default) with (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S86	0	S84 and (pre$1selected, designated, default) same (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S87	2	S84 and (pre$1selected, designated, default) same (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:16
S88	522	(snmp, xml) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S89	318	S88 and translat$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S90	41	(snmp, xml) near3 (adapter, adaptor) same translat$1	US-PGPUB; USPAT;	OR	ON	2011/01/21 16:21

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S91	23	S90 and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:22
S92	2	S91 and snmp near3 trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:28
S93	2	S91 and event same trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:34
S94	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/01/25 11:35
S95	14	S94 and (adapter, adaptor) same (software, module$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S96	1	S94 and (adapter, adaptor) same (software near2 module$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S97	6	S94 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2011/01/25 13:30

			DERWENT; IBM_TDB			
S98	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/06/14 20:23
S99	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/06/15 16:35
S100	18	S99 and gateways	US-PGPUB; USPAT	OR	ON	2011/06/15 16:36
S101	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/06/16 13:08
S102	4633	(selected, predetermined, default) near2 adapter	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:10

S103	101	(selected, predetermined, default) near2 adapter same event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:10
S104	102	(selected, predetermined, default, preselected) near2 adapter same event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:11
S105	25	event$1 and (selected, predetermined, default, preselected) near2 adapter and load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:11
S106	0	S105 and (nms, rmi)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:12
S107	3	(selected, predetermined, default, preselected) near2 adapter$1 same load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:25
S108	11	(selected, predetermined, default, preselected) adj adapter$1 and load$1balanc$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:25
S109	11	S108 and adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/06/06 17:26
S110	31	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$ or US-	US-PGPUB; USPAT	OR	OFF	2013/06/30 19:11

		20030177240-$ or US-20120079567-$ or US-20070271547-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$ or US-7174381-$).did.				

EAST Search History (Interference)

<This search history is empty>

7/1/2013 8:35:38 AM
C:\Users\gmadamba\Documents\EAST\Workspaces\10742573_2009-03-24.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

CPC- SEARCHED		
Symbol	**Date**	**Examiner**

CPC COMBINATION SETS - SEARCHED		
Symbol	**Date**	**Examiner**

US CLASSIFICATION SEARCHED			
Class	**Subclass**	**Date**	**Examiner**
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/
RCE with claim amendments and associated remarks received in response to CTFR. New grounds of rejection provided for the amended claim set and Non-final office action sent out as response.	5/12/2010	/GJM/
Claim amendments and remarks received in response to previous action, and deemed persuasive to overcome initial rejection. Updated search performed in EAST, new grounds of rejection and new non-final provided as response.	1/25/2011	/GJM/
Claim amendments and associated remarks received in response, but the amendments are still unpersuasive to overcome the current rejection as they are still taught by one or more of the applied prior art references. Rebuttal to applicant remarks provided, and Final office action sent out as response.	6/17/2011	/GJM/

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
RCE with claim amendments and associated remarks received in response to previous CTFR provided. Updated search in EAST done, and new grounds of rejection developed for the amended claim set, and Non-final office action sent out as response.	6/30/2013	/GJM/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	002.P056

CONFIRMATION NO. 4061

POA ACCEPTANCE LETTER

23623
TUROCY & WATSON, LLP
127 Public Square
57th Floor, Key Tower
CLEVELAND, OH 44114

OC000000060858599

Date Mailed: 05/06/2013

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/25/2013.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/hchristian/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	002.P056

CONFIRMATION NO. 4061

POWER OF ATTORNEY NOTICE

65638
OMIKRON IP LAW GROUP
5895 Jean Road
LAKE OSWEGO, OR 97035

OC000000060858590

Date Mailed: 05/06/2013

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/25/2013.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/hchristian/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

PTO/SB/80 (04-05)
Approved for use through 11/30/2005. OMB 0651-0035
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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☑ Practitioners associated with the Customer Number: 23623

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☑ The address associated with Customer Number: 23623

OR

☐ Firm or Individual Name	Turocy & Watson, LLP		
Address	127 Public Square, 57th Floor, Key Tower		
City	Cleveland	State Ohio	Zip 44114
Country	United States		
Telephone	(216) 696-8730	Email watson@thepatentattorneys.com	

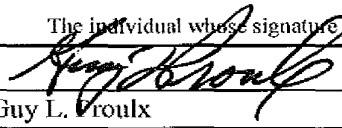
Assignee Name and Address:

Brixham Solutions Ltd.
OMC Chambers, Wickhams Cay 1
Road Town, Tortola, British Virgin Islands

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	4-23-2013
Name	Guy L. Proulx	Telephone	
Title	Managing Director		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. 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 3 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt

EFS ID:	15618239
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Thomas Edward Watson
Filer Authorized By:	
Attorney Docket Number:	002.P056
Receipt Date:	25-APR-2013
Filing Date:	19-DEC-2003
Time Stamp:	20:20:06
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Assignee showing of ownership per 37 CFR 3.73.	373B.pdf	446675 ee423a0d3d27b494f4fb674cac8b1eeca7303555	no	2

Warnings:	
Information:	

2	Power of Attorney	POA.pdf	73288 ce2a16edec058859b5ab3e811335cf1c75dfb6c8	no	1

Warnings:	
Information:	
Total Files Size (in bytes):	519963

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.

New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

PTO/SB/96 (07-09)
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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.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Eileen Zhou, et al.

Application No./Patent No.: 10742573 Filed/Issue Date: 12/19/2003

Titled: Network Management System

Brixham Solutions Ltd. , a Limited Company

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;

2. ☐ an assignee of less than the entire right, title, and interest in (The extent (by percentage) of its ownership interest is _____ %); or

3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy therefore is attached.

OR

B. ☒ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Eileen Zhou, et al. To: Hammerhead Systems

The document was recorded in the United States Patent and Trademark Office at
Reel 014401 , Frame 0969 , or for which a copy thereof is attached.

2. From: Hammerhead Systems To: Brixham Solutions Ltd.

The document was recorded in the United States Patent and Trademark Office at
Reel 023810 , Frame 0916 , or for which a copy thereof is attached.

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☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☒ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Thomas E. Watson/ 2013-04-25

Signature Date

Thomas E. Watson Attorney - 43243

Printed or Typed Name Title

This collection of information is required by 37 CFR 3.73(b). 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 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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 another 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.

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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 contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	10742573	Filing Date	2003-12-19	Docket Number (if applicable)	002.P056	Art Unit	2451
First Named Inventor	Eileen Zhou			Examiner Name	Glenford J. Madamba		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____ (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No _____

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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 contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Thomas C. Richmond/	Date (YYYY-MM-DD)	2011-12-28
Name	Thomas C. Richmond	Registration Number	68271

This collection of information is required by 37 CFR 1.114. 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 12 minutes 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.

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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 the Freedom of Information Act requires disclosure of these records.

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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.

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6. A record in this system of records may be disclosed, as a routine use, to another 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)).

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PTO/SB/22 (09-11)
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U.S. Patent and Trademark Office; U.S. DEPARMENT 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.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)	Docket Number (Optional) 002.P056
Application Number 10/742,573	Filed 12/19/2003
For NETWORK MANAGEMENT SYSTEM	
Art Unit 2451	Examiner MADAMBA, GLENFORD J.

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	$150	$75	$
☐ Two months (37 CFR 1.17(a)(2))	$560	$280	$
☑ Three months (37 CFR 1.17(a)(3))	$1270	$635	$ 1,270.00
☐ Four months (37 CFR 1.17(a)(4))	$1980	$990	$
☐ Five months (37 CFR 1.17(a)(5))	$2690	$1345	$

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☑ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number _____.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration Number 68,271

☐ attorney or agent under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

/Thomas C. Richmond/ — Signature

December 28, 2011 — Date

Thomas C. Richmond — Typed or printed name

503-719-9473 — Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.136(a). 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 6 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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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.
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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.

Electronic Patent Application Fee Transmittal

Application Number:	10742573
Filing Date:	19-Dec-2003
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Filer:	Thomas C Richmond/Lindsey Hunt
Attorney Docket Number:	002.P056

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 3 months with $0 paid	1253	1	1270	1270

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Request for continued examination	1801	1	930	930
		Total in USD ($)		**2200**

Electronic Acknowledgement Receipt

EFS ID:	11717896
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Thomas C Richmond/Lindsey Hunt
Filer Authorized By:	Thomas C Richmond
Attorney Docket Number:	002.P056
Receipt Date:	28-DEC-2011
Filing Date:	19-DEC-2003
Time Stamp:	13:21:08
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$2200
RAM confirmation Number	8461
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Amendment Submitted/Entered with Filing of CPA/RCE	Response_to_FinalOA_002_P056.pdf	116794 3796d98abdc3e9dd50ebce88261a25ab9bad664c	no	16
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	RCE_002_P056.pdf	697429 fb9d24cd85fade66937069f3e6163ee0f1cbe68c	no	3
Warnings:					
Information:					
3	Extension of Time	Extension_of_time_002_P056.pdf	285526 abe521f2fcf340f7fe39f5935b4ba5f7ce5089c9	no	2
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	31735 0ec6e6bc7fa8df7a430c38f36be63e9861cb0e39	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1131484		

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.

New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Eileen Zhou, et al.

Application No.: 10/742,573

Filed: December 19, 2003

For: NETWORK MANAGEMENT SYSTEM

Examiner: MADAMBA, GLENFORD J

Art Group: 2451

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Patent and Trademark Electronic Business Center on:

Date of Deposit: December 28, 2011

Name of Person Mailing: Lindsey N. Hunt

Signature: /Lindsey N. Hunt/ Date: 12/28/2011

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION

Dear Sir:

A request for continued examination (RCE) is submitted with this amendment in response to the Final Office Action mailed on **June 28, 2011**. Applicants hereby request entry of the following amendments and consideration of the following remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-17. (Canceled)

18. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first ~~adaptor~~ adapter an indication of an event from a first network element, ~~the first adapter to be preselected to handle events indicated from the network element,~~ the first ~~adaptor~~ adapter to be one of a plurality of first ~~adaptors~~ adapter for the network management system, ~~each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements,~~ wherein the first ~~adaptor~~ adapter is configured to process information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements;

transferring the first ~~adaptor~~ adapter processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first ~~adaptor~~ adapter processed information based on providing to the first network element a management service to include an event management service to produce an application processed information;

receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second ~~adaptors~~ adapters;

transferring the application processed information to a second ~~adaptor~~ adapter from among the plurality of second ~~adaptors~~ adapters, the second adapter configured to process the application processed information based on a second communication protocol to produce a second adapter processed information; and

transferring the second adapter processed information from the second ~~adaptor~~ adapter to an operation support system.

19-22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first ~~adaptor~~ adapter configured to receive an indication of an event from a first network element, ~~the first adapter to be preselected to handle events indicated from the network element~~, the first ~~adaptor~~ adapter to be one of a plurality of first ~~adaptors~~ adapters for the network management system, ~~each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements~~, wherein the first ~~adaptor~~ adapter is configured to process the information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events

from different groups of network elements;

an application server in a server cluster, the application server configured to receive the first ~~adaptor~~ adapter processed information based on a load balancing scheme, the application server also configured to process the first ~~adaptor~~ adapter processed information based on providing to the network element a management service to include an event management service to produce an application processed information;

a gateway configured to receive the application server processed information the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second ~~adaptors~~ adapters; and a second ~~adaptor~~ adapter from among the plurality of second ~~adaptors~~ adapters, gateway;

the second ~~adaptor~~ adapter configured to:

receive the application server processed information from the gateway,

process the application server processed information based on a second communication protocol to produce a second adapter processed information, and

forward the second ~~adaptor~~ adapter processed information to an operation support system (OSS).

29-32. (Canceled)

33. (Currently Amended) The method of claim 18, wherein the second ~~adaptor~~ adapter configured to process the application server processed information based on the

second communication protocol comprises the second ~~adaptor~~ adapter configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Previously Presented) The method of claim 18, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Currently Amended) The method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (~~COBA~~ CORBA) or Transaction Language 1 (TL1).

36-42. (Canceled)

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (Canceled)

45. (Previously Presented) The method of claim 18, wherein the plurality of

gateways for the network management system comprise a plurality of physically or logically separate gateways.

46. (Previously Presented) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (Previously Presented) The method of claim 18, wherein the first ~~adaptor~~ adapter configured to process information associated with the event based on the first communication protocol comprises the first ~~adaptor~~ adapter configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (Previously Presented) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (Previously Presented) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (Currently Amended) The method of claim 18, wherein the first ~~adaptor~~ adapter and second ~~adaptor~~ adapter are software modules that are configured to run on Java virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first ~~adaptor~~ adapter and the second ~~adaptor~~ adapter are configured to communicate with the application server over an RMI interface.

52. (Previously Presented) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (Previously Presented) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS / ARGUMENTS

In the Claims:

Claims 18, 23-24, 26, 28, 33-35, 43, and 45-53 are pending in this application.

Claims 18, 28, 33, 35, 47, and 50-51 are currently amended. No new matter has been added. Support for the claim amendments can be found in the specification at least at: pg. 4, lines 7-13; pgs. 7-8, lines 21-2; pg. 11, lines 10-11; pg. 16, lines 5-7; pgs. 16-17, lines 20-2; pgs. 17-18, lines 20-6; pg. 19, line 2; pg. 19, lines 9-11; pg. 19, lines 14-16; pg. 21, lines 11-13; pg. 21, lines 16-18; and pg. 22, lines 4-9.

Claims 19-22, 25, 27, 29-32, 36-42, and 44 are canceled.

Claim Rejections

Claims 18, 23, 26, 28, 33, 35, 45-49, and 51-53 were rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al. (US 7,111,077) in view of Page et al. (US 5,812,768), Hamilton II (US 7,325,062), Levesque et al. (US 2004/0107277 A1), and Li et al. (US 2005/0108387 A1).

Independent claim 18 has been amended to recite, in part, "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". In general, Starkovich discloses "A plurality of adapters convert each of the differing request formats into a single input format for the single generic gateway." (Starkovich at Col. 3, lines 55-57). Starkovich

further discloses "there is a different adapter for each input format employed." (Starkovich at Col. 7, lines 14-15). Starkovich does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Starkovich.

Page does not cure the deficiency of Starkovich. In general, Page discloses a "service broker" that "manages service requests from, and responsive services provided by, a plurality of clients and servers, respectively". (Page at Col. 3, lines 32-34). Page further discloses that "clients and servers communicate and exchange information with one another via the broker". (Page at Col. 3, lines 39-40). Page does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Page.

Hamilton does not cure the deficiency of Starkovich and Page. In general, Hamilton discloses "reallocating adapters in a logically partitioned environment". (Hamilton at Abstract). Hamilton further discloses that "The adapters of server 400 are divided by logical partitioning into first virtual system 402 and second virtual system 404. If at least one of the adapters of first virtual system 402 exceeds the recipient load threshold and at least one of the adapters of second virtual system 404 is below the

donor load threshold, then second virtual system 404 will be eligible to donate an adapter to first virtual system 402. By moving an adapter such as adapter 406 to first virtual system 402, adapter 406 can be donated to first virtual system 402." (Hamilton at [0051]). The Examiner stated that "Hamilton discloses the additionally recited features of the method including transferring the adapter processed information to an application server in a server cluster according to a load balancing scheme". (Final Rejection sent 6/28/2011, pg. 9). Applicant respectfully disagrees. Instead Hamilton discloses "moving an adapter". (Hamilton at [0051]). Further, Hamilton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Hamilton.

Levesque does not cure the deficiency of Starkovich, Page, and Hamilton. In general, Levesque discloses "A network element management system in which network elements can be grouped, and viewed and manipulated by groups". (Levesque at Abstract). Levesque further discloses "configuration management features to support easy and rapid provisioning and inventory management for both individual NEs and entire transport networks". (Levesque at [0098]). Levesque does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an

event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Levesque.

Li does not cure the deficiency of Starkovich, Page, Hamilton, and Levesque. In general, Li discloses "A system for network management incorporates Presence and Instant messaging (PIM) techniques" which "provides monitoring of servers, network elements, and resources". (Li at Abstract). Li further discloses "An adapter 26 is provided in the EMS for network mediation through communications stacks which provide PIM capability for the associated PIM equipped network elements and standard SNMP, CORBA, TL1 and CLI communications for non-equipped network elements". (Li at [0021]). In particular, Li discloses "The EMS is configured to know which network elements are PIM equipped or not PIM equipped allowing the EMS to select the appropriate adapter element to communicate with the managed network elements". (Li at [0023]). Li does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Li.

Therefore, claim 18 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claims 23, 26, 33, 35, 45-49, and 51 depend directly or indirectly on amended claim 18. Based at least in part on their dependency, claims 23, 26, 33, 35, 45-49, and 51 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Independent claim 28 claims similar subject matter as in amended claim 18, and accordingly independent claim 28 is also patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claims 52-53 depend directly or indirectly from amended claim 28. Based at least in part on their dependency, claims 52-53 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claim 50 was rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Fenton et al. (US 2004/0040030 A1.)

Claim 50 depends from amended claim 18. Based at least in part on its dependency, claim 50 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Li as described in the section for claim 18 above.

Fenton does not cure the deficiency of Starkovich, Page, Hamilton, Levesque, and Li. In general, Fenton discloses "adapter modules 124, 126 integrate the resource 106 by collectively executing scripts, which define the function or functions to be performed by server 102 and/or gateway 104" so that "the executing scripts cause server 102 and/or gateway 104 to behave as an adapter". (Fenton at [0013]). Fenton further discloses "adapter modules 124, 126 represent Java applications that run on or under one or more Java Virtual Machines (JVMs)". (Fenton at [0025]). Fenton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent

indications of an event from the first network element are handled by the first adapter". Therefore, claim 50 is patentable over Fenton.

Therefore, claim 50 is patentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Fenton.

Claims 24 and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Schiefer et al. (US 2004/0249644 A1).

Claims 24 and 34 depend directly or indirectly from amended claim 18. Based at least in part on its dependency, claims 24 and 34 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li as described in the section for claim 18 above.

Shiefer does not cure the deficiency of Starkovich, Page, Hamilton, Levesque, and Li. In general, Shiefer discloses "a method (and structure) in which a decision-making data warehouse system operates in near real-time". (Shiefer at [0012]). Shiefer further discloses the use of "a J2EE Application Server with its middleware services, such as *** load-balancing". (Shiefer at [0038]). Shiefer does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claims 24 and 34 are patentable over Shiefer.

Therefore, claims 24 and 34 are patentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Shiefer.

Claim 43 was rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, and Upton et al. (US 2003/0093403 A1).

Claim 43 depends from claim 18. Based at least in part on its dependency, claim 43 is patentable over Starkovich in view of Page, Hamilton, and Levesque as described in the section for claim 18 above.

Upton does not cure the deficiency of Starkovich, Page, Hamilton, and Levesque. In general, Upton discloses "event adapter" which "allows the enterprise system to initiate communication with, or receive communication from, the client application". (Upton at Abstract). Upton further discloses "messages generated by an application to be managed following a publish/subscribe model". (Upton at [0047]). Upton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 43 is patentable over Upton.

Therefore, claim 43 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Upton.

Conclusion:

Applicant respectfully submits that claims 18, 23-24, 26, 28, 33-35, 43, and 45-53 are patentable, and accordingly, the application is now in condition for allowance. Early issuance of the Notice of Allowance is respectfully requested.

Any fees or extensions of time believed to be due in connection with this amendment are enclosed herein. Please consider this a request for any extension.

The Examiner is invited to call Tom Richmond at (503) 333-0212 if there remains any issue with allowance of this case.

Respectfully submitted,

Dated: December 28, 2011

/Thomas C. Richmond/
Thomas Richmond
Registration No. 68,271

Omikron IP Law Group
16325 Boones Ferry Road, Suite 204
Lake Oswego, OR 97035

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 12/28/2011	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 18	Minus	** 20	= 0	X $ =		OR	X $60=	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $250=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/CATHERINE SMITH/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

65638 7590 09/28/2011

OMIKRON IP LAW GROUP
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SUITE 204
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EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
09/28/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 10/742,573	**Applicant(s)** ZHOU ET AL.	
	Examiner GLENFORD MADAMBA	**Art Unit** 2451	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 August 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires _____months from the mailing date of the final rejection.
   b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

   Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: *18, 23-24, 26, 28, 33-35, 43, 45-53*.
   Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Please do not enter upon appeal. thanks
GJM

Attorney's Docket No.: 002.P056 Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Eileen Zhou, et al.

Application No.: 10/742,573

Filed: December 19, 2003

For: NETWORK MANAGEMENT SYSTEM

Examiner: MADAMBA, GLENFORD J

Art Group: 2451

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Patent and Trademark Electronic Business Center on:

Date of Deposit: August 29, 2011

Name of Person Mailing: Lindsey N. Hunt

Signature: /Lindsey N. Hunt/ Date: 8/29/11

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

RESPONSE TO OFFICE ACTION

Dear Sir:

This communication is being submitted in response to the Office Action mailed on **June 28, 2011**. Reconsideration of the captioned application, in light of the following amendments and remarks is respectfully requested.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 9 of this paper.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011			
	1	✓	✓	✓	-	-	-			
	2	✓	✓	✓	-	-	-			
	3	✓	✓	✓	-	-	-			
	4	✓	✓	✓	-	-	-			
	5	✓	✓	✓	-	-	-			
	6	✓	✓	✓	-	-	-			
	7	✓	✓	✓	-	-	-			
	8	✓	✓	✓	-	-	-			
	9	✓	✓	✓	-	-	-			
	10	✓	✓	✓	-	-	-			
	11	✓	✓	-	-	-	-			
	12	✓	✓	-	-	-	-			
	13	✓	✓	-	-	-	-			
	14	✓	✓	-	-	-	-			
	15	✓	✓	✓	-	-	-			
	16	✓	✓	-	-	-	-			
	17	✓	✓	✓	-	-	-			
	18	✓	✓	✓	✓	✓	✓			
	19	✓	✓	✓	✓	-	-			
	20	✓	✓	✓	✓	-	-			
	21	✓	✓	✓	✓	-	-			
	22	✓	✓	-	-	-	-			
	23	✓	✓	✓	✓	✓	✓			
	24	✓	✓	✓	✓	✓	✓			
	25	✓	✓	-	-	-	-			
	26	✓	✓	✓	✓	✓	✓			
	27	✓	✓	-	-	-	-			
	28	✓	✓	✓	✓	✓	✓			
	29	✓	✓	✓	-	-	-			
	30	✓	✓	-	-	-	-			
	31	✓	✓	-	-	-	-			
	32	✓	✓	-	-	-	-			
	33			✓	✓	✓	✓			
	34			✓	✓	✓	✓			
	35			✓	✓	✓	✓			
	36			✓	-	-	-			

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011	09/24/2011			
	37			✓	-	-	-			
	38			✓	-	-	-			
	39			✓	-	-	-			
	40			✓	-	-	-			
	41			✓	-	-	-			
	42			✓	-	-	-			
	43			✓	✓	✓	✓			
	44				✓	-	-			
	45				✓	✓	✓			
	46				✓	✓	✓			
	47				✓	✓	✓			
	48				✓	✓	✓			
	49				✓	✓	✓			
	50				✓	✓	✓			
	51				✓	✓	✓			
	52				✓	✓	✓			
	53				✓	✓	✓			

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application for:

Eileen Zhou, et al.

Application No.: 10/742,573

Filed: December 19, 2003

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RESPONSE TO OFFICE ACTION

Dear Sir:

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Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 9 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-17. (Canceled)

18. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first ~~adaptor~~ adapter an indication of an event from a first network element, ~~the first adapter to be preselected to handle events indicated from the network element,~~ the first ~~adaptor~~ adapter to be one of a plurality of first ~~adaptors~~ adapter for the network management system, ~~each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements,~~ wherein the first ~~adaptor~~ adapter is configured to process information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events from different groups of network elements;

transferring the first ~~adaptor~~ adapter processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first ~~adaptor~~ adapter processed information based on providing to the first network element a management service to include an event management service to produce an application processed information;

receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second ~~adaptors~~ adapters;

transferring the application processed information to a second ~~adaptor~~ adapter from among the plurality of second ~~adaptors~~ adapters, the second adapter configured to process the application processed information based on a second communication protocol to produce a second adapter processed information; and

transferring the second adapter processed information from the second ~~adaptor~~ adapter to an operation support system.

19-22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first ~~adaptor~~ adapter configured to receive an indication of an event from a first network element, ~~the first adapter to be preselected to handle events indicated from the network element~~, the first ~~adaptor~~ adapter to be one of a plurality of first ~~adaptors~~ adapters for the network management system, ~~each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements~~, wherein the first ~~adaptor~~ adapter is configured to process the information associated with the event based on a first communication protocol to produce a first adapter processed information, wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter, and wherein each of the plurality of first adapters is to be preselected to handle events

from different groups of network elements;

an application server in a server cluster, the application server configured to receive the first ~~adaptor~~ adapter processed information based on a load balancing scheme, the application server also configured to process the first ~~adaptor~~ adapter processed information based on providing to the network element a management service to include an event management service to produce an application processed information;

a gateway configured to receive the application server processed information the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second ~~adaptors~~ adapters; and a second ~~adaptor~~ adapter from among the plurality of second ~~adaptors~~ adapters, gateway;

the second ~~adaptor~~ adapter configured to:

receive the application server processed information from the gateway,

process the application server processed information based on a second communication protocol to produce a second adapter processed information, and

forward the second ~~adaptor~~ adapter processed information to an operation support system (OSS).

29-32. (Canceled)

33. (Currently Amended) The method of claim 18, wherein the second ~~adaptor~~ adapter configured to process the application server processed information based on the

second communication protocol comprises the second ~~adaptor~~ adapter configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Previously Presented) The method of claim 18, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Currently Amended) The method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (~~COBA~~ CORBA) or Transaction Language 1 (TL1).

36-42. (Canceled)

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (Canceled)

45. (Previously Presented) The method of claim 18, wherein the plurality of

gateways for the network management system comprise a plurality of physically or logically separate gateways.

46. (Previously Presented) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (Previously Presented) The method of claim 18, wherein the first ~~adaptor~~ adapter configured to process information associated with the event based on the first communication protocol comprises the first ~~adaptor~~ adapter configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (Previously Presented) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (Previously Presented) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (Currently Amended) The method of claim 18, wherein the first ~~adaptor~~ adapter and second ~~adaptor~~ adapter are software modules that are configured to run on Java virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first ~~adaptor~~ adapter and the second ~~adaptor~~ adapter are configured to communicate with the application server over an RMI interface.

52. (Previously Presented) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (Previously Presented) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS / ARGUMENTS

In the Claims:

Claims 18, 23-24, 26, 28, 33-35, 43, and 45-53 are pending in this application.

Claims 18, 28, 33, 35, 47, and 50-51 are currently amended. No new matter has been added. Support for the claim amendments can be found in the specification at least at: pg. 4, lines 7-13; pgs. 7-8, lines 21-2; pg. 11, lines 10-11; pg. 16, lines 5-7; pgs. 16-17, lines 20-2; pgs. 17-18, lines 20-6; pg. 19, line 2; pg. 19, lines 9-11; pg. 19, lines 14-16; pg. 21, lines 11-13; pg. 21, lines 16-18; and pg. 22, lines 4-9.

Claims 19-22, 25, 27, 29-32, 36-42, and 44 are canceled.

Claim Rejections

Claims 18, 23, 26, 28, 33, 35, 45-49, and 51-53 were rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al. (US 7,111,077) in view of Page et al. (US 5,812,768), Hamilton II (US 7,325,062), Levesque et al. (US 2004/0107277 A1), and Li et al. (US 2005/0108387 A1).

Independent claim 18 has been amended to recite, in part, “wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter”. In general, Starkovich discloses “A plurality of adapters convert each of the differing request formats into a single input format for the single generic gateway.” (Starkovich at Col. 3, lines 55-57). Starkovich

further discloses "there is a different adapter for each input format employed." (Starkovich at Col. 7, lines 14-15). Starkovich does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Starkovich.

Page does not cure the deficiency of Starkovich. In general, Page discloses a "service broker" that "manages service requests from, and responsive services provided by, a plurality of clients and servers, respectively". (Page at Col. 3, lines 32-34). Page further discloses that "clients and servers communicate and exchange information with one another via the broker". (Page at Col. 3, lines 39-40). Page does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Page.

Hamilton does not cure the deficiency of Starkovich and Page. In general, Hamilton discloses "reallocating adapters in a logically partitioned environment". (Hamilton at Abstract). Hamilton further discloses that "The adapters of server 400 are divided by logical partitioning into first virtual system 402 and second virtual system 404. If at least one of the adapters of first virtual system 402 exceeds the recipient load threshold and at least one of the adapters of second virtual system 404 is below the

donor load threshold, then second virtual system 404 will be eligible to donate an adapter to first virtual system 402. By moving an adapter such as adapter 406 to first virtual system 402, adapter 406 can be donated to first virtual system 402." (Hamilton at [0051]). The Examiner stated that "Hamilton discloses the additionally recited features of the method including transferring the adapter processed information to an application server in a server cluster according to a load balancing scheme". (Final Rejection sent 6/28/2011, pg. 9). Applicant respectfully disagrees. Instead Hamilton discloses "moving an adapter". (Hamilton at [0051]). Further, Hamilton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Hamilton.

Levesque does not cure the deficiency of Starkovich, Page, and Hamilton. In general, Levesque discloses "A network element management system in which network elements can be grouped, and viewed and manipulated by groups". (Levesque at Abstract). Levesque further discloses "configuration management features to support easy and rapid provisioning and inventory management for both individual NEs and entire transport networks". (Levesque at [0098]). Levesque does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an

event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Levesque.

Li does not cure the deficiency of Starkovich, Page, Hamilton, and Levesque. In general, Li discloses "A system for network management incorporates Presence and Instant messaging (PIM) techniques" which "provides monitoring of servers, network elements, and resources". (Li at Abstract). Li further discloses "An adapter 26 is provided in the EMS for network mediation through communications stacks which provide PIM capability for the associated PIM equipped network elements and standard SNMP, CORBA, TL1 and CLI communications for non-equipped network elements". (Li at [0021]). In particular, Li discloses "The EMS is configured to know which network elements are PIM equipped or not PIM equipped allowing the EMS to select the appropriate adapter element to communicate with the managed network elements". (Li at [0023]). Li does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 18 is patentable over Li.

Therefore, claim 18 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claims 23, 26, 33, 35, 45-49, and 51 depend directly or indirectly on amended claim 18. Based at least in part on their dependency, claims 23, 26, 33, 35, 45-49, and 51 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Independent claim 28 claims similar subject matter as in amended claim 18, and accordingly independent claim 28 is also patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claims 52-53 depend directly or indirectly from amended claim 28. Based at least in part on their dependency, claims 52-53 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li.

Claim 50 was rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Fenton et al. (US 2004/0040030 A1.)

Claim 50 depends from amended claim 18. Based at least in part on its dependency, claim 50 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Li as described in the section for claim 18 above.

Fenton does not cure the deficiency of Starkovich, Page, Hamilton, Levesque, and Li. In general, Fenton discloses "adapter modules 124, 126 integrate the resource 106 by collectively executing scripts, which define the function or functions to be performed by server 102 and/or gateway 104" so that "the executing scripts cause server 102 and/or gateway 104 to behave as an adapter". (Fenton at [0013]). Fenton further discloses "adapter modules 124, 126 represent Java applications that run on or under one or more Java Virtual Machines (JVMs)". (Fenton at [0025]). Fenton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent

indications of an event from the first network element are handled by the first adapter". Therefore, claim 50 is patentable over Fenton.

Therefore, claim 50 is patentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Fenton.

Claims 24 and 34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Schiefer et al. (US 2004/0249644 A1).

Claims 24 and 34 depend directly or indirectly from amended claim 18. Based at least in part on its dependency, claims 24 and 34 are patentable over Starkovich in view of Page, Hamilton, Levesque, and Li as described in the section for claim 18 above.

Shiefer does not cure the deficiency of Starkovich, Page, Hamilton, Levesque, and Li. In general, Shiefer discloses "a method (and structure) in which a decision-making data warehouse system operates in near real-time". (Shiefer at [0012]). Shiefer further discloses the use of "a J2EE Application Server with its middleware services, such as *** load-balancing". (Shiefer at [0038]). Shiefer does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claims 24 and 34 are patentable over Shiefer.

Therefore, claims 24 and 34 are patentable over Starkovich in view of Page, Hamilton, Levesque, Li, and Shiefer.

Claim 43 was rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Page, Hamilton, Levesque, and Upton et al. (US 2003/0093403 A1).

Claim 43 depends from claim 18. Based at least in part on its dependency, claim 43 is patentable over Starkovich in view of Page, Hamilton, and Levesque as described in the section for claim 18 above.

Upton does not cure the deficiency of Starkovich, Page, Hamilton, and Levesque. In general, Upton discloses "event adapter" which "allows the enterprise system to initiate communication with, or receive communication from, the client application". (Upton at Abstract). Upton further discloses "messages generated by an application to be managed following a publish/subscribe model". (Upton at [0047]). Upton does not teach or suggest at least "wherein the first adapter is preselected in response to a preselection event to handle events indicated from the network element, wherein the first adapter is preselected using a load balancing scheme, wherein any subsequent indications of an event from the first network element are handled by the first adapter". Therefore, claim 43 is patentable over Upton.

Therefore, claim 43 is patentable over Starkovich in view of Page, Hamilton, Levesque, and Upton.

Conclusion:

Applicant respectfully submits that claims 18, 23-24, 26, 28, 33-35, 43, and 45-53 are patentable, and accordingly, the application is now in condition for allowance. Early issuance of the Notice of Allowance is respectfully requested.

Any fees or extensions of time believed to be due in connection with this amendment are enclosed herein. Please consider this a request for any extension.

The Examiner is invited to call Tom Richmond at (503) 333-0212 if there remains any issue with allowance of this case.

Respectfully submitted,

Dated: August 29, 2011

/Thomas C. Richmond/
Thomas Richmond
Registration No. 68,271

Omikron IP Law Group
16325 Boones Ferry Road, Suite 204
Lake Oswego, OR 97035

Electronic Acknowledgement Receipt

EFS ID:	10838499
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Thomas C Richmond/Lindsey Hunt
Filer Authorized By:	Thomas C Richmond
Attorney Docket Number:	002.P056
Receipt Date:	29-AUG-2011
Filing Date:	19-DEC-2003
Time Stamp:	19:28:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Arguments/Remarks Made in an Amendment	Response_to_OA_002_P056.pdf	116369 4b2bbb3075ef10ba12ae24c07dab16da2a87b9cf	no	16

Warnings:	
Information:	

Total Files Size (in bytes):	116369

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.

New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT **08/29/2011**

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 18	Minus	** 20	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/KIM WATSON/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTOL-413A (10-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 10/742,573 First Named Applicant: Eileen Zhou
Examiner: Madamba, Glenford Art Unit: 2451 Status of Application: Final Rejection

Tentative Participants:
(1) Glenford Madamba (2) Tom Richmond
(3) Robert Chang (4) Blayne Green

Proposed Date of Interview: Wed., Jul. 20, 2011 **Proposed Time:** 4:30 EST (AM/PM)

Type of Interview Requested:
(1) [X] Telephonic (2) [ ] Personal (3) [ ] Video Conference

Exhibit To Be Shown or Demonstrated: [ ] YES [X] NO
If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) Rej.	18, 28	Starkovich, Li	[ ]	[ ]	[ ]
(2)			[ ]	[ ]	[ ]
(3)			[ ]	[ ]	[ ]
(4)			[ ]	[ ]	[ ]

[ ] Continuation Sheet Attached
[ ] Proposed Amendment or Arguments Attached

Brief Description of Arguments to be Presented:
Discuss possible claim amendments. In particular, amending "preselection" steps to include a load balancing step in response to network events, subsequent network events not requiring further load balancing, and further preselection in response to some network events.

An interview was conducted on the above-identified application on _____.
NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).
This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

s/Thomas C. Richmond/
Applicant/Applicant's Representative Signature

_____
Examiner/SPE Signature

Thomas C. Richmond
Typed/Printed Name of Applicant or Representative

68,271
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. 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 21 minutes 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. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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 another 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.

Electronic Acknowledgement Receipt

EFS ID:	10549817
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Robert Hyun Chang/Lindsey Hunt
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Letter Requesting Interview with Examiner	Applicant_Initiated_Interview_Request_Form_002_P056_signed.pdf	191964 bc50354ec04e9fb039f2c8bfc4864cb584356447	no	2

Warnings:	
Information:	

Total Files Size (in bytes):	191964

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New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

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EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
06/28/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/742,573	ZHOU ET AL.	
	Examiner	Art Unit	
	GLENFORD MADAMBA	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,23,24,26,28,33-35,43 and 45-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18, 23-24, 26, 28, 33-35, 43 and 45-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to remarks and claim amendments filed by Applicant's representative on April 25, 2011.

Response to Arguments and Remarks

2. Applicant's arguments and remarks filed April 25, 2011 have been fully considered, but are deemed unpersuasive to overcome the rejection of the claims in view of the current grounds of rejection and the applied prior art reference(s). The Office maintains that all of the argued feature(s) of the claimed invention are properly and sufficiently taught or disclosed by one or more of the prior art references in accordance with the present claim recitation and/or language requirements.

With regards to the claims, and claim 18 in particular, Applicant argues that none of the prior art references used in the rejection, either individually or in combination, teaches or discloses particular features of the claim, which recites in part "receiving at a first adaptor an indication of an event from a network element, the first adapter to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different

groups of network elements…". In support of his argument, Applicant remarks that Levesque does not teach or suggest the above feature, and nor do any of the other prior art references (Starkovich, Hamilton, Pageet and/or Li) cure the deficiencies of Levesque . The Office respectfully disagrees and submits that Applicant has misinterpreted and/or not fully considered all of the teachings and disclosures of the prior art references.

In response to the argument, the Office firstly remarks that Levesque expressly discloses as part of his invention a Network Management System (e.g., NETSMART) comprising one or more Element Managements Systems {EMS} in which network elements can be grouped, viewed and manipulated by groups [Abstract] [Figs. 1 & 1a]. As illustrated in Fig. 1a, a multi-vendor network comprising a plurality of vendors (Vendors A, B, C….X) having vendor-specific or standard interfaces may be coupled to a particular Vendor EMS of the network management system, and it is well-known that an EMS may be comprised by one or more network interface or mediation adaptors, In this regard, the Office notes that any supposed deficiency of Levesque is sufficiently and expressly addressed or cured by at Least Li, who expressly illustrates Element Management System {EMS} _14 coupled to NMS 12 of his invention, wherein EMS_ 14 is comprising Adaptor module_26 for interfacing / mediating between a plurality of PIM Network Elements and/or non-PIM capable Network elements (e.g., NE1-3 PIM clients and NEa-b Clients) [Fig. 1]. Li also further expressly teaches and discloses the Adaptor 26 may be comprising one or more network element / vendor specific adaptors, such as

CMIP Adaptor_26a, SNMP Adaptor_26b and TL1 & CLI Adaptor 26c, which is specifically selected to handle or mediate a particular CMIP, SNMP, or TL1 & CLI 'request', 'event' and/or 'command' [Fig. 5] [0021-0022]. In this regard, the Office notes that Li also expressly teaches that "the EMS is configured to know which network elements are PIM equipped or not PIM equipped, allowing EMS to 'select the appropriated adaptor element (i.e., CMIP Adaptor_26a, SNMP Adaptor_26b and TL1 & CLI Adaptor 26c) to communicate with the managed network elements" [0023]. Thus, the argued feature is disclosed by at least Levesque and/or Li.

Additionally, the Office also notes that the argued feature is alternatively broadly and reasonably disclosed by Starkovich, who expressly teaches and illustrates a first plurality of adaptors (Adaptor 0, Adaptor 1 and Adaptor M) associated with a plurality of Clients (clients 0-m), wherein one of the adaptors is associated with a particular client type (e.g., a DCOM Client 68, which may issue a service request using Visual Basic, C++, or ASP), and wherein the clients sends its service requests to a 'respective associated adapter' (e.g., Client 0 _92 service requests are specifically sent to Adapter 0_84, Client 1 _90 service requests are specifically sent to Adapter 1_86, and Client m _94 service requests are specifically sent to Adapter m_88…). Accordingly, the argued feature of a "first adapter to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system.." is thus alternatively taught also by Starkovich.

Further with regards to the claim, Applicant secondly argues / remarks that none of the cited prior art references teach or discloses the newly amended feature or limitation of "wherein each gateway of the plurality of gateways is *preselected* to transfer application processed information to one or more of a plurality of second adaptors". In response to the remark, the Office asserts that the newly amended feature is nonetheless *still* taught or disclosed by one or more of the cited prior art references, as will be established and provided in the rejection below. Li, for example, expressly discloses and illustrates as part of his invention an embodiment wherein the invention is comprising a plurality of Element Management Systems [EMS] (e.g., EMS1-3) or 'gateways', wherein each EMS is comprising a respective Adaptor module 26, and wherein each Adaptor 26 may be comprising one or more network element / vendor specific adaptors, such as CMIP Adaptor_26a, SNMP Adaptor_26b and TL1 & CLI Adaptor 26c, which is specifically selected to handle or mediate a particular CMIP, SNMP, or TL1 & CLI 'request', 'event' and/or 'command'. With reference to Fig. 4. Li expressly illustrates wherein a particular EMS is selected or assigned to interface with one or more network element clients of a particular one or more Managed Network10a-d [Figs. 4 & 5] [0021-0022].

With regards to claims 24, 34, 43 and 50, the Office notes that the claims depend from independent claim 18, inheriting all of the features of their parent claim, and the rejection of the claims are accordingly maintained for at least the same reasoning and justifications provided above for claim 18.

Response to Amendments

1. Applicant's latest filed claim amendments and corresponding remarks filed on April 25, 2011 have been fully considered, but are now deemed moot in light of the following grounds of rejection provided with this action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18-21, 23, 26, 28, 33, 35, 44-49, 51-52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1 in view of Pageet et al (hereinafter Pageet), U.S. Patent 5,812,768 in view of Hamilton II et al (hereinafter Hamilton), U.S. Patent 7,325,062 B2 and in further view of Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1 and Li et al (hereinafter Li), U.S. Patent Publication 2005/0108387 A1.

As per claims 18 and 28, Starkovich discloses particular features of the invention including the features of a method of communicating in a network management system, comprising the step of "receiving at a gateway (e.g., GGATE 72) [Figs. 2, 3 & 4] the application server processed information" (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] and "transferring the second adapter processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.] to a client" (e.g., Client 0, Client 1, …Client m) [Figs. 1-4 & 8].

But while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited features of the method including receiving at a first adaptor information from a network element, the first adaptor configured to process the information based on a first communication protocol; transferring the first adaptor processed information to an application server; and receiving at a second adaptor associated with the gateway the application server processed information, the second adaptor configured to process the application server processed information based on a second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and

operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method including "receiving at a first adaptor 'information' from a network element (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the first adaptor configured to process the information based on a first communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]; and "receiving at a second adaptor associated with the gateway the application server processed information (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the second adaptor configured to process the application server processed information based on a second communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment

that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

But while Starkovich and Pageet disclose substantial features of the invention as above, they do not explicitly disclose the additionally recited features of the method including "transferring first adaptor-processed information to an application server in a server cluster based on a load balancing scheme". However, the said feature is taught by Hamilton in a related endeavor.

Hamilton discloses as his invention a method and system for automated adapter reallocation and optimization between logical partitions. Hamilton's invention comprises a Performance Enhancement Program (PEP) that allows an administrator to designate several parameters and identify 'donor' and 'recipient' adapter candidates, and wherein a Reallocation Program (RP) compiles performance data of the adapters [Abstract] [Fig. 4]. Specifically, Hamilton discloses the additionally recited features of the method including transferring the adaptor processed information to an application server in a server cluster according to a load balancing scheme" (" (e.g., Hamilton: e.g., Dynamic

Partitioning of resources in a 'Cluster Computing Environment') [col 2, L19-20] (e.g., monitoring performance parameters of all I/O adapters and/or each individual subclass of adapters) [col 3, L33 – 58] (e.g., 'Load-balanced Adapters') [col 3, L65 – col 4, 15] [Figs. 5-8].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Pageet, with the above said feature, as disclosed by Hamilton, for the motivation of providing both a system and method to automate the control and movement of resources in a dynamic logical partitioning environment [col 1, L67 – col 2, L2].

Further, while the combination of Starkovich, Pageet and Hamilton disclose substantial features of the invention as above, the combination does not explicitly disclose the additional recited features of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the network element a management service to include an event management service", "wherein the 'information' received at a first adaptor comprises an indication of an event", and the method further comprising "transferring the second adapter processed information to an Operation Support System. Nevertheless, the said features are disclosed by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited features of the method wherein the application server is configured to process the first adaptor processed information

"based on providing to the network element a management service to include an event management service", "wherein the 'information' received at a first adaptor comprises an indication of an event" (e.g., 'Event Services') [Figure 34] (e.g., Fault Management) [0127] (e.g. Transient condition Events) [1222], and the method further comprising "transferring the second adapter processed information to an Operation Support System e.g., 'Operational Support System') [0172].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Lastly, while the combination of Starkovich, Pageet, Hamilton and Levesque disclose substantial features of the invention as above, including the recited feature of "wherein the gateway is one of a plurality of gateways for the network management system" (Starkovich: e.g., GGATE, XGATE,) [col 4, L34-62] (e.g.,JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5], the combination does not *explicitly* disclose the additional recited feature of the method "wherein the first adapter is *preselected* to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of the first adaptors to be preselected to handle events from different groups of network elements.." and "the gateway to be one or a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to

transfer application process information to one or more of a plurality of second adaptors". Nevertheless, the said feature is expressly disclosed by Li in a related endeavor.

Li discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Li discloses the additional recited feature of the method "wherein the first adapter is *preselected* to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of the first adaptors to be preselected to handle events from different groups of network elements.." (e.g., 'Adaptor' _26, comprising 'CMIP Adaptro' _26a, 'SNMP Adaptor' _26b and/or 'TL1 / CLI Adaptor' _26c for handling and/or processing of various 'faults' or 'events' {i.e., 'CMIP Event', 'SNMP Trap' event, configuration 'changes' and/or SNMP 'failure' / 'alarm' events}) [0022-0023] [0027] [0029] [Figs. 1, 2 and 4-6] as well as the feature of "the gateway to be one or a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application process information to one or more of a plurality of second adaptors" (e.g., Li discloses and illustrates as part of his invention an embodiment wherein the invention is comprising a plurality of Element Management Systems [EMS] (e.g., EMS1-3) or 'gateways', wherein each EMS is comprising a respective Adaptor module 26, and wherein each Adaptor 26 may be comprising one or more network element / vendor specific adaptors, such as CMIP Adaptor_26a, SNMP Adaptor_26b and TL1 & CLI Adaptor 26c, which is specifically selected to handle or mediate a particular CMIP, SNMP, or TL1 & CLI 'request', 'event' and/or 'command'.

With reference to Fig. 4,. Li expressly illustrates wherein a particular EMS is specifically selected or assigned to interface with one or more particular network element clients of a particular one or more Managed Network10a-d [Figs. 4 & 5] [0021-0022].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Li, for the motivation of providing an element management system {EMS} that employs presence and instance messaging {PIM} for communications to the managed network elements in a network using a simplified communications protocol without significantly increased system hardware and software complexity [0001 & 0009].

Claim 28 recites similar limitations as those recited by claim 18, is distinguishable only by its statutory category (network management system), and accordingly rejected on the same basis as the previously rejected claim.

As per claim 23, Starkovich discloses the method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element [Figs. 1-5].

As per claim 26, Starkovich discloses the method of claim 18, wherein the first adapter is on a separate physical machine from the application server [Figs. 1-5].

As per claims 33, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the

method wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having 'different network architectures and associated communications protocols' " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}] (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE protocol for

communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claims 35, Starkovich discloses the method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1) (e.g., XML) [Abstract] (e.g., CORBA _352) [Fig. 4].

As per claim 45, Starkovich discloses the method of claim 18, wherein the plurality of gateways for the network management system comprise a plurality of physically or logically separate gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 46, Starkovich discloses the method of claim 18, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claim 47, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the method wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages. However, the said feature is taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly

formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]..

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claim 48, Starkovich discloses the method of claim 18, further including the gateway configured to process common functions associated with the application server processed information (e.g., the gateway converts the service request to a format acceptable by an Enterprise Server) [Abstract] [Figs. 2-5, 8 & 9] (e.g., the gate interfaces with the connector and finally the service is performed on the mainframe…")

(e.g., "GGate and XGate and their adapters support pass through requests…) [col 4, L8-62] [col 11, L7-16].

As per claims 49 and 53, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method "wherein the indication of the event from the network element is associated with a configuration of the network element". However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited feature of the method "wherein the information from the network element is associated with a configuration of the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Configuration Management' features to support easy and rapid provisioning and inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 51, Starkovich discloses the method of claim 18, wherein the first adaptor and the second adaptor are configured to communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

As per claim 52, while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element". However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additional recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element (Pageet: e.g., 'DDE Server', 'DCE Server' or 'LU.62 Server' [Fig. 8] [also Figs. 5a-b, 6 & 7g].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as

disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

2. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further view of Li and Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 50, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additionally recited feature of the method wherein the first adaptor and the second adaptor are software modules that are configured to run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (Fenton: e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [Fenton: 0001-002].

3. Claims 24 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further view of Li and Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 24 and 34, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including the additional recited feature of the

method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing') [0038]. In this regard, it would be obvious to select the server with the light load in the cluster, as is well-known in 'load-balanced' cluster networks.

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

4. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and Upton et al (hereinafter Upton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 43, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use

by the operation support system to manage the network element. However, the feature is taught by Upton in a related endeavor.

Upton discloses as his invention system and method for implementing an event adapter [Abstract] [Fig. 1]. Specifically, Upton discloses the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element (Upton: e.g., 'Publish Event') [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Upton, for the motivation of providing a method and system and integration solution that is easy to use, affordable and based on industry standards, and also has universal connectivity, capable of massive scalability and has accessible business process tools [Upton: 0016] [0021].

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP 706.06(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2451

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011				
	1	✓	✓	✓	-	-				
	2	✓	✓	✓	-	-				
	3	✓	✓	✓	-	-				
	4	✓	✓	✓	-	-				
	5	✓	✓	✓	-	-				
	6	✓	✓	✓	-	-				
	7	✓	✓	✓	-	-				
	8	✓	✓	✓	-	-				
	9	✓	✓	✓	-	-				
	10	✓	✓	✓	-	-				
	11	✓	✓	-	-	-				
	12	✓	✓	-	-	-				
	13	✓	✓	-	-	-				
	14	✓	✓	-	-	-				
	15	✓	✓	✓	-	-				
	16	✓	✓	-	-	-				
	17	✓	✓	✓	-	-				
	18	✓	✓	✓	✓	✓				
	19	✓	✓	✓	✓	-				
	20	✓	✓	✓	✓	-				
	21	✓	✓	✓	✓	-				
	22	✓	✓	-	-	-				
	23	✓	✓	✓	✓	✓				
	24	✓	✓	✓	✓	✓				
	25	✓	✓	-	-	-				
	26	✓	✓	✓	✓	✓				
	27	✓	✓	-	-	-				
	28	✓	✓	✓	✓	✓				
	29	✓	✓	✓	-	-				
	30	✓	✓	-	-	-				
	31	✓	✓	-	-	-				
	32	✓	✓	-	-	-				
	33			✓	✓	✓				
	34			✓	✓	✓				
	35			✓	✓	✓				
	36			✓	-	-				

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☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011	06/19/2011				
	37			✓	-	-				
	38			✓	-	-				
	39			✓	-	-				
	40			✓	-	-				
	41			✓	-	-				
	42			✓	-	-				
	43			✓	✓	✓				
	44				✓	-				
	45				✓	✓				
	46				✓	✓				
	47				✓	✓				
	48				✓	✓				
	49				✓	✓				
	50				✓	✓				
	51				✓	✓				
	52				✓	✓				
	53				✓	✓				

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

SEARCHED

Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/
RCE with claim amendments and associated remarks received in response to CTFR. New grounds of rejection provided for the amended claim set and Non-final office action sent out as response.	5/12/2010	/GJM/
Claim amendments and remarks received in response to previous action, and deemed persuasive to overcome initial rejection. Updated search performed in EAST, new grounds of rejection and new non-final provided as response.	1/25/2011	/GJM/
Claim amendments and associated remarks received in response, but the amendments are still unpersuasive to overcome the current rejection as they are still taught by one or more of the applied prior art references. Rebuttal to applicant remarks provided, and Final office action sent out as response.	6/17/2011	/GJM/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/742,573	Confirmation No.:	4061
Applicant:	Zhou, Ellen, *et al.*	Group Art Unit:	2451
Filing Date:	December 19, 2003	Examiner:	Madamba, Glenford J.
Docket No.:	002.P056		
Customer No.:	65638	**AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED FEBRUARY 1, 2011**	
For:	NETWORK MANAGEMENT SYSTEM	**SUBMITTED THROUGH EFS-WEB**	

AMENDMENT

Dear Sir:

In response to the Office Action mailed February 1, 2011, Applicants respectfully request that the following amendments and remarks be made part of the official record in the above captioned case.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin at page 6 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 17. (Canceled).

18. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first adaptor an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process information associated with the event based on a first communication protocol;

transferring the first adaptor processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors;

~~receiving at~~ transferring the application processed information to a second adaptor from among the plurality of second adaptors ~~associated with the gateway the application processed information~~, the second adapter configured to process the application processed information based on a second communication protocol; and

transferring the second adapter processed information from the second adaptor to an operation support system.

19-22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first adaptor configured to receive an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process ~~the~~ information associated with the event based on a first communication protocol;

an application server in a server cluster, the application server configured to receive the first adaptor processed information based on a load balancing scheme, the application server also configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

a gateway configured to receive the application server processed information the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors; and

a second adaptor from among the plurality of second adaptors, ~~associated with the gateway,~~ the second adaptor configured to:

receive the application server processed information from the gateway,

process the application server processed information based on a second communication protocol, and

forward the second adaptor processed information to an operation support system (OSS).

29 - 32. (Canceled)

33. (Previously Presented) The method of claim 18, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Previously Presented) The method of claim 18, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Previously Presented) The method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

36 – 42. (Canceled)

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (Canceled)

45. (Currently Amended) The method of claim 18, wherein the ~~gateway is one of~~ plurality of gateways for the network management system comprise a plurality of physically or logically separate gateways.

46. (Previously Presented) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (Previously Presented) The method of claim 18, wherein the first adaptor configured to process information associated with the event based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (Previously Presented) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (Previously Presented) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are software modules that are configured to run on Java virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are configured to communicate with the application server over an RMI interface.

52. (Previously Presented) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (Previously Presented) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS

The above-referenced patent application has been reviewed in light of the Office Action mailed **February 1, 2011** (the "Action"). In the Action, claims 18-21, 23, 26, 28, 33, 35, 44-49, 51, 52 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,111,077 to Starkovich *et al.* ("Starkovich") in view of U.S. Patent 5,812,768 to Pageet *et al.* ("Pageet) in view of U.S. Patent 7,325,062 to Hamilton II *et al.* ("Hamilton") and in further view of U.S. Patent Publication US 2004/0107277 to Levesque *et al.* ("Levesque") and to U.S. Patent Publication 2005/0108387 to Li *et al.* ("Li"). Claim 50 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and U.S. Patent Publication US 2004/0040030 to Fenton *et al.* ("Fenton"). Claims 24 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich, Pageet, Hamilton, Levesque and in further view of Li and U.S. Patent Publication US 2004/0249644 to Scheifer *et al.* ("Scheifer"). Also, claim 43 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and U.S. Patent Publication US 2003/0093403 to Upton *et al.* ("Upton").

Current Status of Claims:

With this amendment, claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are pending. Applicants offer to amend claims 18, 28, 45, 50 and 51. Also, with this amendment, in addition to previously canceled claims 1-17, 22, 25, 27, 29 and 30-32, Applicants have also canceled claims 19-21 and 44. No new matter has been introduced.

Rejection of claims 18, 28, 45, 50 and 51 under 35 U.S.C. §103(a):

Relevant portions of claim 18, as amended, are as follows:

> "A method of communicating in a network management system, including:
>
> receiving at a first adaptor an indication of an event from a network element, the first adapter to be preselected to handle events indicated from the network element, *the first adaptor to be one of a plurality of first adaptors for the network management system,* ***each first adaptor*** *of the plurality of first adaptors to be* ***preselected to handle events from different groups of network elements,*** wherein the first adaptor is configured to process information associated with the event based on a first

communication protocol;
transferring…;
receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, ***each gateway*** *of the plurality of gateways to be preselected to transfer application processed* ***information to*** *one or more of a plurality of second* ***adaptors***;
transferring the application processed information to a second adaptor from among the plurality of second adaptors…."

Emphasis added.

Claim 18 has been amended to include elements of currently canceled claims 20 and 44. First, regarding the elements of claim 44, on page 12 of the Action, Examiner states, "Starkovich discloses the method of claim 18, wherein the gateway is one of a plurality of gateways." (See col. 4, L34-64 and FIG. 5). However, Starkovich does not disclose the above-emphasized portion of claim 18 that includes "*each* gateway of the plurality of gateways to be *preselected to transfer* application processed *information to* one or more of a plurality of *second adaptors*;…". Emphasis added. FIG. 5 of Starkovich only shows adaptors coupled to only a single gateway (GGATE). Further, rather than transferring information to adaptors as emphasized above for claim 18, Starkovich only mentions that GGATE **receives information from** adaptors. (See col. 8, L9-12) Nowhere in Starkovich is there a description (or figure) of information going **from GGATE** (or any gateway) **to an adaptor**.

Second, regarding the elements of claim 20, on page 9 of the Action, Examiner states, "Levesque discloses the additionally recited feature of the method wherein the adaptor is one of a plurality of adaptors, **wherein each adapter is preselected to handle events from a group of network elements**…" Emphasis added. The Examiner points to the Abstract of Levesque for support of the rejection of claim 20. However, Applicants submit that the above-emphasized portion of amended claim 18 which includes, "*each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, ...*" is not described in the Abstract of Levesque or any other portion of Levesque. Additionally, Examiner admits on page 8 of the Action, that Starkovich, Pageet, Hamilton and **Levesque** do not disclose the features of "wherein the first adapter, is preselected to handle events…"

For at least the above-mentioned reasons, Starkovich in view of Pageet, in view of Hamilton and further in view of Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Hamilton, Pageet and Li were not cited in the Action to address the above-

mentioned deficiencies in Starkovich and Levesque and Applicants submit that Hamilton, Pageet and Li fail to cure those deficiencies. Therefore, Applicants request that the rejection of claim 18 be withdrawn. Also, independent claim 28, as amended, includes similar elements to the above-emphasized portions of claim 18. Further, claims 23, 26, 33, 35, 44-49, 51, 52 and 53 depend from claim 18 or claim 28. Thus, Applicants request that the 35 U.S.C. § 103(a) rejections of independent claim 28 and dependant claims 23, 26, 33, 35, 44-49, 51, 52 and 53 also be withdrawn.

Rejection of claim 50 under 35 U.S.C. §103(a):

In the Action at item 2, claim 50 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further in view of Li and Fenton. Claim 50 depends on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a prima facie 35 U.S.C. § 103(a) rejection of claim 18. Fenton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Fenton fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Therefore, Starkovich, Pageet, Hamilton, Levesque, Li and Fenton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 50. Applicants request that the rejection of claim 50 be withdrawn.

Rejection of claims 23 and 24 under 35 U.S.C. §103(a):

In the Action at item 3, claims 24 and 34 were rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Scheifer. Claims 24 and 34 both depend on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 24 and 34. Applicants request that the rejection of claims 24 and 34 be withdrawn.

Rejection of claim 43 under 35 U.S.C. §103(a):

In the Action at item 4, claim 43 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Upton. Claim 43 depends from claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Upton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Upton fails to cure all of the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Upton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 43. Applicants request that the rejection of claim 43 be withdrawn.

Conclusion:

Applicants respectfully submit that claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are in condition for allowance and such action is earnestly solicited. ***The Examiner is respectfully requested to contact the undersigned by telephone at (503) 551-9442 if it is believed that such contact would further the examination of the present application.***

Respectfully submitted,

Date: April 25, 2011

by: /Ted A. Crawford/Reg. No. 50,610/
Ted A. Crawford
Reg. No. 50,610

Electronic Acknowledgement Receipt

EFS ID:	9951383
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Ted A. Crawford/Lindsey Hunt
Filer Authorized By:	Ted A. Crawford
Attorney Docket Number:	002.P056
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Arguments/Remarks Made in an Amendment	Response_to_OA_10742573.pdf	136704 03414f3d98037e6cb8cf912ff3e1dc34ea278c3f	no	9

Warnings:	
Information:	

Total Files Size (in bytes):	136704

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New Applications Under 35 U.S.C. 111

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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/742,573	Confirmation No.:	4061
Applicant:	Zhou, Ellen, *et al.*	Group Art Unit:	2451
Filing Date:	December 19, 2003	Examiner:	Madamba, Glenford J.
Docket No.:	002.P056		
Customer No.:	65638	**AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED FEBRUARY 1, 2011**	
For:	NETWORK MANAGEMENT SYSTEM	**SUBMITTED THROUGH EFS-WEB**	

AMENDMENT

Dear Sir:

In response to the Office Action mailed February 1, 2011, Applicants respectfully request that the following amendments and remarks be made part of the official record in the above captioned case.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin at page 6 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 17. (Canceled).

18. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first adaptor an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process information associated with the event based on a first communication protocol;

transferring the first adaptor processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors;

~~receiving at~~ transferring the application processed information to a second adaptor from among the plurality of second adaptors ~~associated with the gateway the application processed information~~, the second adapter configured to process the application processed information based on a second communication protocol; and

transferring the second adapter processed information from the second adaptor to an operation support system.

19-22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first adaptor configured to receive an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process ~~the~~ information associated with the event based on a first communication protocol;

an application server in a server cluster, the application server configured to receive the first adaptor processed information based on a load balancing scheme, the application server also configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

a gateway configured to receive the application server processed information the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors; and

a second adaptor from among the plurality of second adaptors, ~~associated with the gateway,~~ the second adaptor configured to:

receive the application server processed information from the gateway,

process the application server processed information based on a second communication protocol, and

forward the second adaptor processed information to an operation support system (OSS).

29 - 32. (Canceled)

33. (Previously Presented) The method of claim 18, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Previously Presented) The method of claim 18, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Previously Presented) The method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

36 – 42. (Canceled)

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (Canceled)

45. (Currently Amended) The method of claim 18, wherein the ~~gateway is one of~~ plurality of gateways for the network management system comprise a plurality of physically or logically separate gateways.

46. (Previously Presented) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (Previously Presented) The method of claim 18, wherein the first adaptor configured to process information associated with the event based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (Previously Presented) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (Previously Presented) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are software modules that are configured to run on Java virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are configured to communicate with the application server over an RMI interface.

52. (Previously Presented) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (Previously Presented) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS

The above-referenced patent application has been reviewed in light of the Office Action mailed **February 1, 2011** (the "Action"). In the Action, claims 18-21, 23, 26, 28, 33, 35, 44-49, 51, 52 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,111,077 to Starkovich *et al.* ("Starkovich") in view of U.S. Patent 5,812,768 to Pageet *et al.* ("Pageet) in view of U.S. Patent 7,325,062 to Hamilton II *et al.* ("Hamilton") and in further view of U.S. Patent Publication US 2004/0107277 to Levesque *et al.* ("Levesque") and to U.S. Patent Publication 2005/0108387 to Li *et al.* ("Li"). Claim 50 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and U.S. Patent Publication US 2004/0040030 to Fenton *et al.* ("Fenton"). Claims 24 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich, Pageet, Hamilton, Levesque and in further view of Li and U.S. Patent Publication US 2004/0249644 to Scheifer *et al.* ("Scheifer"). Also, claim 43 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and U.S. Patent Publication US 2003/0093403 to Upton *et al.* ("Upton").

Current Status of Claims:

With this amendment, claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are pending. Applicants offer to amend claims 18, 28, 45, 50 and 51. Also, with this amendment, in addition to previously canceled claims 1-17, 22, 25, 27, 29 and 30-32, Applicants have also canceled claims 19-21 and 44. No new matter has been introduced.

Rejection of claims 18, 28, 45, 50 and 51 under 35 U.S.C. §103(a):

Relevant portions of claim 18, as amended, are as follows:

> "A method of communicating in a network management system, including:
>
> receiving at a first adaptor an indication of an event from a network element, the first adapter to be preselected to handle events indicated from the network element, *the first adaptor to be one of a plurality of first adaptors for the network management system,* ***each first adaptor*** *of the plurality of first adaptors to be* ***preselected to handle events from different groups of network elements,*** wherein the first adaptor is configured to process information associated with the event based on a first

communication protocol;
transferring…;
receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, ***each gateway*** *of the plurality of gateways to be preselected to transfer application processed* ***information to*** *one or more of a plurality of second* ***adaptors***;
transferring the application processed information to a second adaptor from among the plurality of second adaptors…."

Emphasis added.

Claim 18 has been amended to include elements of currently canceled claims 20 and 44. First, regarding the elements of claim 44, on page 12 of the Action, Examiner states, "Starkovich discloses the method of claim 18, wherein the gateway is one of a plurality of gateways." (See col. 4, L34-64 and FIG. 5). However, Starkovich does not disclose the above-emphasized portion of claim 18 that includes "*each* gateway of the plurality of gateways to be *preselected to transfer* application processed *information to* one or more of a plurality of *second adaptors*;…". Emphasis added. FIG. 5 of Starkovich only shows adaptors coupled to only a single gateway (GGATE). Further, rather than transferring information to adaptors as emphasized above for claim 18, Starkovich only mentions that GGATE **receives information from** adaptors. (See col. 8, L9-12) Nowhere in Starkovich is there a description (or figure) of information going **from GGATE** (or any gateway) **to an adaptor**.

Second, regarding the elements of claim 20, on page 9 of the Action, Examiner states, "Levesque discloses the additionally recited feature of the method wherein the adaptor is one of a plurality of adaptors, **wherein each adapter is preselected to handle events from a group of network elements**…" Emphasis added. The Examiner points to the Abstract of Levesque for support of the rejection of claim 20. However, Applicants submit that the above-emphasized portion of amended claim 18 which includes, "*each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, ...*" is not described in the Abstract of Levesque or any other portion of Levesque. Additionally, Examiner admits on page 8 of the Action, that Starkovich, Pageet, Hamilton and **Levesque** do not disclose the features of "wherein the first adapter, is preselected to handle events…"

For at least the above-mentioned reasons, Starkovich in view of Pageet, in view of Hamilton and further in view of Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Hamilton, Pageet and Li were not cited in the Action to address the above-

mentioned deficiencies in Starkovich and Levesque and Applicants submit that Hamilton, Pageet and Li fail to cure those deficiencies. Therefore, Applicants request that the rejection of claim 18 be withdrawn. Also, independent claim 28, as amended, includes similar elements to the above-emphasized portions of claim 18. Further, claims 23, 26, 33, 35, 44-49, 51, 52 and 53 depend from claim 18 or claim 28. Thus, Applicants request that the 35 U.S.C. § 103(a) rejections of independent claim 28 and dependant claims 23, 26, 33, 35, 44-49, 51, 52 and 53 also be withdrawn.

Rejection of claim 50 under 35 U.S.C. §103(a):

In the Action at item 2, claim 50 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further in view of Li and Fenton. Claim 50 depends on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a prima facie 35 U.S.C. § 103(a) rejection of claim 18. Fenton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Fenton fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Therefore, Starkovich, Pageet, Hamilton, Levesque, Li and Fenton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 50. Applicants request that the rejection of claim 50 be withdrawn.

Rejection of claims 23 and 24 under 35 U.S.C. §103(a):

In the Action at item 3, claims 24 and 34 were rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Scheifer. Claims 24 and 34 both depend on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 24 and 34. Applicants request that the rejection of claims 24 and 34 be withdrawn.

Rejection of claim 43 under 35 U.S.C. §103(a):

In the Action at item 4, claim 43 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Upton. Claim 43 depends from claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Upton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Upton fails to cure all of the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Upton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 43. Applicants request that the rejection of claim 43 be withdrawn.

Conclusion:

Applicants respectfully submit that claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are in condition for allowance and such action is earnestly solicited. ***The Examiner is respectfully requested to contact the undersigned by telephone at (503) 551-9442 if it is believed that such contact would further the examination of the present application.***

Respectfully submitted,

Date: April 25, 2011

by: /Ted A. Crawford/Reg. No. 50,610/
Ted A. Crawford
Reg. No. 50,610

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/742,573	Confirmation No.:	4061
Applicant:	Zhou, Ellen, *et al.*	Group Art Unit:	2451
Filing Date:	December 19, 2003	Examiner:	Madamba, Glenford J.
Docket No.:	002.P056		
Customer No.:	65638	**AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED FEBRUARY 1, 2011**	
For:	NETWORK MANAGEMENT SYSTEM	**SUBMITTED THROUGH EFS-WEB**	

AMENDMENT

Dear Sir:

In response to the Office Action mailed February 1, 2011, Applicants respectfully request that the following amendments and remarks be made part of the official record in the above captioned case.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin at page 6 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 17. (Canceled).

18. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first adaptor an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process information associated with the event based on a first communication protocol;

transferring the first adaptor processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors;

~~receiving at~~ transferring the application processed information to a second adaptor from among the plurality of second adaptors ~~associated with the gateway the application processed information~~, the second adapter configured to process the application processed information based on a second communication protocol; and

transferring the second adapter processed information from the second adaptor to an operation support system.

19-22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first adaptor configured to receive an indication of an event from a network element, ~~wherein~~ the first adapter ~~is~~ to be preselected to handle events indicated from the network element, the first adaptor to be one of a plurality of first adaptors for the network management system, each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, wherein the first adaptor ~~and~~ is configured to process ~~the~~ information associated with the event based on a first communication protocol;

an application server in a server cluster, the application server configured to receive the first adaptor processed information based on a load balancing scheme, the application server also configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

a gateway configured to receive the application server processed information the gateway to be one of a plurality of gateways for the network management system, each gateway of the plurality of gateways to be preselected to transfer application processed information to one or more of a plurality of second adaptors; and

a second adaptor from among the plurality of second adaptors, ~~associated with the gateway,~~ the second adaptor configured to:

receive the application server processed information from the gateway,

process the application server processed information based on a second communication protocol, and

forward the second adaptor processed information to an operation support system (OSS).

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33. (Previously Presented) The method of claim 18, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Previously Presented) The method of claim 18, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Previously Presented) The method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

36 – 42. (Canceled)

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (Canceled)

45. (Currently Amended) The method of claim 18, wherein the ~~gateway is one of~~ plurality of gateways for the network management system comprise a plurality of physically or logically separate gateways.

46. (Previously Presented) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (Previously Presented) The method of claim 18, wherein the first adaptor configured to process information associated with the event based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (Previously Presented) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (Previously Presented) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are software modules that are configured to run on Java virtual machines.

51. (Currently Amended) The method of claim 18, wherein the first adaptor and the second ~~adapters~~ adaptor are configured to communicate with the application server over an RMI interface.

52. (Previously Presented) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (Previously Presented) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS

The above-referenced patent application has been reviewed in light of the Office Action mailed **February 1, 2011** (the "Action"). In the Action, claims 18-21, 23, 26, 28, 33, 35, 44-49, 51, 52 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,111,077 to Starkovich *et al.* ("Starkovich") in view of U.S. Patent 5,812,768 to Pageet *et al.* ("Pageet) in view of U.S. Patent 7,325,062 to Hamilton II *et al.* ("Hamilton") and in further view of U.S. Patent Publication US 2004/0107277 to Levesque *et al.* ("Levesque") and to U.S. Patent Publication 2005/0108387 to Li *et al.* ("Li"). Claim 50 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and U.S. Patent Publication US 2004/0040030 to Fenton *et al.* ("Fenton"). Claims 24 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich, Pageet, Hamilton, Levesque and in further view of Li and U.S. Patent Publication US 2004/0249644 to Scheifer *et al.* ("Scheifer"). Also, claim 43 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and U.S. Patent Publication US 2003/0093403 to Upton *et al.* ("Upton").

Current Status of Claims:

With this amendment, claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are pending. Applicants offer to amend claims 18, 28, 45, 50 and 51. Also, with this amendment, in addition to previously canceled claims 1-17, 22, 25, 27, 29 and 30-32, Applicants have also canceled claims 19-21 and 44. No new matter has been introduced.

Rejection of claims 18, 28, 45, 50 and 51 under 35 U.S.C. §103(a):

Relevant portions of claim 18, as amended, are as follows:

> "A method of communicating in a network management system, including:
>
> receiving at a first adaptor an indication of an event from a network element, the first adapter to be preselected to handle events indicated from the network element, *the first adaptor to be one of a plurality of first adaptors for the network management system,* ***each first adaptor*** *of the plurality of first adaptors to be* ***preselected to handle events from different groups of network elements,*** wherein the first adaptor is configured to process information associated with the event based on a first

communication protocol;
transferring…;
receiving at a gateway the application processed information, the gateway to be one of a plurality of gateways for the network management system, ***each gateway*** *of the plurality of gateways to be preselected to transfer application processed* ***information to*** *one or more of a plurality of second* ***adaptors***;
transferring the application processed information to a second adaptor from among the plurality of second adaptors…."

Emphasis added.

Claim 18 has been amended to include elements of currently canceled claims 20 and 44. First, regarding the elements of claim 44, on page 12 of the Action, Examiner states, "Starkovich discloses the method of claim 18, wherein the gateway is one of a plurality of gateways." (See col. 4, L34-64 and FIG. 5). However, Starkovich does not disclose the above-emphasized portion of claim 18 that includes "*each* gateway of the plurality of gateways to be *preselected to transfer* application processed *information to* one or more of a plurality of *second adaptors*;…". Emphasis added. FIG. 5 of Starkovich only shows adaptors coupled to only a single gateway (GGATE). Further, rather than transferring information to adaptors as emphasized above for claim 18, Starkovich only mentions that GGATE **receives information from** adaptors. (See col. 8, L9-12) Nowhere in Starkovich is there a description (or figure) of information going **from GGATE** (or any gateway) **to an adaptor**.

Second, regarding the elements of claim 20, on page 9 of the Action, Examiner states, "Levesque discloses the additionally recited feature of the method wherein the adaptor is one of a plurality of adaptors, **wherein each adapter is preselected to handle events from a group of network elements**…" Emphasis added. The Examiner points to the Abstract of Levesque for support of the rejection of claim 20. However, Applicants submit that the above-emphasized portion of amended claim 18 which includes, "*each first adaptor of the plurality of first adaptors to be preselected to handle events from different groups of network elements, ...*" is not described in the Abstract of Levesque or any other portion of Levesque. Additionally, Examiner admits on page 8 of the Action, that Starkovich, Pageet, Hamilton and **Levesque** do not disclose the features of "wherein the first adapter, is preselected to handle events…"

For at least the above-mentioned reasons, Starkovich in view of Pageet, in view of Hamilton and further in view of Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Hamilton, Pageet and Li were not cited in the Action to address the above-

mentioned deficiencies in Starkovich and Levesque and Applicants submit that Hamilton, Pageet and Li fail to cure those deficiencies. Therefore, Applicants request that the rejection of claim 18 be withdrawn. Also, independent claim 28, as amended, includes similar elements to the above-emphasized portions of claim 18. Further, claims 23, 26, 33, 35, 44-49, 51, 52 and 53 depend from claim 18 or claim 28. Thus, Applicants request that the 35 U.S.C. § 103(a) rejections of independent claim 28 and dependant claims 23, 26, 33, 35, 44-49, 51, 52 and 53 also be withdrawn.

Rejection of claim 50 under 35 U.S.C. §103(a):

In the Action at item 2, claim 50 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further in view of Li and Fenton. Claim 50 depends on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a prima facie 35 U.S.C. § 103(a) rejection of claim 18. Fenton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Fenton fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Therefore, Starkovich, Pageet, Hamilton, Levesque, Li and Fenton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 50. Applicants request that the rejection of claim 50 be withdrawn.

Rejection of claims 23 and 24 under 35 U.S.C. §103(a):

In the Action at item 3, claims 24 and 34 were rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Scheifer. Claims 24 and 34 both depend on claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 24 and 34. Applicants request that the rejection of claims 24 and 34 be withdrawn.

Rejection of claim 43 under 35 U.S.C. §103(a):

In the Action at item 4, claim 43 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and further in view of Li and Upton. Claim 43 depends from claim 18. As mentioned above, Starkovich, Pageet, Hamilton, Levesque and Li do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Upton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Further, Applicants submit that Upton fails to cure all of the above-mentioned deficiencies in Starkovich, Pageet, Hamilton, Levesque and Li. Consequently, Starkovich, Pageet, Hamilton, Levesque, Li and Upton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 43. Applicants request that the rejection of claim 43 be withdrawn.

Conclusion:

Applicants respectfully submit that claims 18, 23, 24, 26, 28, 33-35, 43 and 45-53 are in condition for allowance and such action is earnestly solicited. ***The Examiner is respectfully requested to contact the undersigned by telephone at (503) 551-9442 if it is believed that such contact would further the examination of the present application.***

Respectfully submitted,

Date: April 25, 2011

by: /Ted A. Crawford/Reg. No. 50,610/
Ted A. Crawford
Reg. No. 50,610

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
	04/25/2011									
	Total (37 CFR 1.16(i))	* 18	Minus	** 44	= 0	X $ =		OR	X $52=	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***10	= 0	X $ =		OR	X $220=	0
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	**0**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))									
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/Trina Steptoe/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

65638 7590 02/01/2011

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EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
02/01/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/742,573	ZHOU ET AL.	
	Examiner	Art Unit	
	Glenford Madamba	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-21,23,24,26,28,33-35 and 43-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-21,23,24,26,28,33-35 and 43-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to claim amendments and remarks filed by Applicant's representative on November 10, 2010.

Response to Amendments

1. With respect to Applicant's amendments filed on November 10, 2010, the newly filed claim amendments and corresponding remarks have been fully considered, but are now considered moot in light of following *new* grounds of rejection provided in this Office Action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 18-21, 23, 26, 28, 33, 35, 44-49, 51-52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1 in view of Pageet et al (hereinafter Pageet), U.S. Patent 5,812,768 in view of Hamilton II et al (hereinafter Hamilton), U.S. Patent 7,325,062 B2 and in further view of Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1 and Li et al (hereinafter Li), U.S. Patent Publication 2005/0108387 A1.

As per claims 18 and 28, Starkovich discloses particular features of the invention including the features of a method of communicating in a network management system, comprising the step of "receiving at a gateway (e.g., GGATE 72) [Figs. 2, 3 & 4] the application server processed information" (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] and "transferring the second adapter processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.] to a client" (e.g., Client 0, Client 1, …Client m) [Figs. 1-4 & 8].

But while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited features of the method including receiving at a first adaptor information from a network element, the first adaptor configured to process the information based on a first communication protocol; transferring the first adaptor processed information to an application server; and receiving at a second adaptor associated with the gateway the application server processed information, the second adaptor configured to process the application server

processed information based on a second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method including "receiving at a first adaptor 'information' from a network element (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the first adaptor configured to process the information based on a first communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]; and "receiving at a second adaptor associated with the

gateway the application server processed information (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the second adaptor configured to process the application server processed information based on a second communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

But while Starkovich and Pageet disclose substantial features of the invention as above, they do not explicitly disclose the additionally recited features of the method including "transferring first adaptor-processed information to an application server in a server cluster based on a load balancing scheme". However, the said feature is taught by Hamilton in a related endeavor.

Hamilton discloses as his invention a method and system for automated adapter reallocation and optimization between logical partitions. Hamilton's invention comprises a Performance Enhancement Program (PEP) that allows an administrator to designate several parameters and identify 'donor' and 'recipient' adapter candidates, and wherein a Reallocation Program (RP) compiles performance data of the adapters [Abstract] [Fig. 4]. Specifically, Hamilton discloses the additionally recited features of the method including transferring the adaptor processed information to an application server in a server cluster according to a load balancing scheme" (" (e.g., Hamilton: e.g., Dynamic Partitioning of resources in a 'Cluster Computing Environment') [col 2, L19-20] (e.g., monitoring performance parameters of all I/O adapters and/or each individual subclass of adapters) [col 3, L33 – 58] (e.g., 'Load-balanced Adapters') [col 3, L65 – col 4, 15] [Figs. 5-8].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Pageet, with the above said feature, as disclosed by Hamilton, for the motivation of providing both a system and method to automate the control and movement of resources in a dynamic logical partitioning environment [col 1, L67 – col 2, L2].

Further, while the combination of Starkovich, Pageet and Hamilton disclose substantial features of the invention as above, the combination does not explicitly disclose the additional recited features of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the

network element a management service to include an event management service", "wherein the 'information' received at a first adaptor comprises an indication of an event", and the method further comprising "transferring the second adapter processed information to an Operation Support System. Nevertheless, the said features are disclosed by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited features of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the network element a management service to include an event management service", "wherein the 'information' received at a first adaptor comprises an indication of an event" (e.g., 'Event Services') [Figure 34] (e.g., Fault Management) [0127] (e.g. Transient condition Events) [1222], and the method further comprising "transferring the second adapter processed information to an Operation Support System e.g., 'Operational Support System') [0172].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Lastly, while the combination of Starkovich, Pageet, Hamilton and Levesque disclose substantial features of the invention as above, the combination does not explicitly disclose the additional recited feature of the method "wherein the first adapter is *preselected* to handle events indicated from the network element". Nevertheless, the said feature is disclosed by Li in a related endeavor.

Li discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Li discloses the additional recited feature of the method "wherein the first adapter is *preselected* to handle events indicated from the network element" (e.g., 'Adaptor' _26, comprising 'CMIP Adaptro' _26a, 'SNMP Adaptor' _26b and/or 'TL1 / CLI Adaptor' _26c for handling and/or processing of various 'faults' or 'events' {i.e., 'CMIP Event', 'SNMP Trap' event, configuration 'changes' and/or SNMP 'failure' / 'alarm' events}) [0022-0023] [0027] [0029] [Figs. 1, 2 and 4-6].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Li, for the motivation of providing an element management system {EMS} that employs presence and instance messaging {PIM} for communications to the managed network elements in a network using a simplified communications protocol without significantly increased system hardware and software complexity [0001 & 0009].

Claim 28 recites similar limitations as those recited by claim 18, is distinguishable only by its statutory category (network management system), and accordingly rejected on the same basis as the previously rejected claim.

As per claims 19-21, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as above for claim 18, they do not explicitly disclose the additionally recited feature of the method wherein the first adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements (Levesque: e.g, a 'network element management system' wherein network elements can be 'grouped', viewed and manipulated according to groups) [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich, Pageet and Hamilton with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claims 20 and 21 recites similar limitations as claim 19 and are accordingly rejected on the same basis.

As per claim 23, Starkovich discloses the method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element [Figs. 1-5].

As per claim 26, Starkovich discloses the method of claim 18, wherein the first adapter is on a separate physical machine from the application server [Figs. 1-5].

As per claims 33, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the method wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having 'different network architectures and associated communications protocols' " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}] (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE protocol for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claims 35, Starkovich discloses the method of claim 18, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML),

Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1) (e.g., XML) [Abstract] (e.g., CORBA _352) [Fig. 4].

As per claim 44, Starkovich discloses the method of claim 18, wherein the gateway is one of a plurality of gateways. (e.g., GGATE, XGATE,) [col 4, L34-62] (e.g.,JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 45, Starkovich discloses the method of claim 18, wherein the gateway is one of a plurality of physically or logically separate gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 46, Starkovich discloses the method of claim 18, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claim 47, while Starkovich discloses substantial features of the invention as above for claim 18, he does not explicitly disclose the additionally recited features of the method wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol

specific messages associated with the application server into commonly formatted messages. However, the said feature is taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]..

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claim 48, Starkovich discloses the method of claim 18, further including the gateway configured to process common functions associated with the application server processed information (e.g., the gateway converts the service request to a format acceptable by an Enterprise Server) [Abstract] [Figs. 2-5, 8 & 9] (e.g., the gate interfaces with the connector and finally the service is performed on the mainframe…") (e.g., "GGate and XGate and their adapters support pass through requests…) [col 4, L8-62] [col 11, L7-16].

As per claims 49 and 53, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method "wherein the indication of the event from the network element is associated with a configuration of the network element". However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract].

Specifically, Levesque discloses the additional recited feature of the method "wherein the information from the network element is associated with a configuration of the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Configuration Management' features to support easy and rapid provisioning and inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 51, Starkovich discloses the method of claim 18, wherein the first and second adapters communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

As per claim 52, while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element". However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additional recited feature of the system "wherein the application server is preselected to handle information associated with events indicated from the network element (Pageet: e.g., 'DDE Server', 'DCE Server' or 'LU.62 Server' [Fig. 8] [also Figs. 5a-b, 6 & 7g].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

2. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further view

of Li and Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 50, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additionally recited feature of the method wherein the first and second adapters are software modules that are configured to run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (Fenton: e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [Fenton: 0001-002].

3. Claims 24 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton in view of Levesque and in further view of Li and Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 24 and 34, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 18, they do not explicitly disclose the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing') [0038]. In this regard, it would be obvious to select the server with the light load in the cluster, as is well-known in 'load-balanced' cluster networks.

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by

Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

4. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and Upton et al (hereinafter Upton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 43, while the combination of Starkovich, Pageet, Hamilton, Levesque and Li discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element. However, the feature is taught by Upton in a related endeavor.

Upton discloses as his invention system and method for implementing an event adapter [Abstract] [Fig. 1]. Specifically, Upton discloses the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element (Upton: e.g., 'Publish Event') [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Upton, for the motivation of providing a method and system and integration solution that is easy to use, affordable and based on industry standards, and also has universal connectivity, capable of massive scalability and has accessible business process tools [Upton: 0016] [0021].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2451

Notice of References Cited	Application/Control No. 10/742,573	Applicant(s)/Patent Under Reexamination ZHOU ET AL.	
	Examiner Glenford Madamba	Art Unit 2451	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2005/0108387	05-2005	Li et al.	709/224
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:24
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57

S8	2	S4 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:02
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16

S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:00
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01

S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:06
S26	106	jvm same (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13

S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28

S42	17	gateway and load $1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:37
S43	48	load$1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S44	31	S43 not S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S45	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.	US-PGPUB; USPAT	OR	ON	2010/08/06 12:30
S46	1	S45 and (configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31

S47	215	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:31
S48	40079	(configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S49	61	S47 and S48	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S50	86208	(configuration, security) near3 (management, service$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S51	61	S47 and S50	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S52	149	S47 and S50	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S53	56	S52 and (first, second) near4 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S54	0	S53 and rmi adj interface	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S55	7	S53 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33

S56	14	S53 and (oss, corba, cluster, mib)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:35
S57	56	S53 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:38
S58	124	SNMP near5 (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S59	72	SNMP near2 (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S60	37	SNMP adj (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S61	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-	US-PGPUB; USPAT	OR	ON	2010/08/06 16:15

		6757899-$ or US-7325062-$ or US-7058758-$).did.				
S62	8	S61 and operation$3 near3 (support, service$1)	US-PGPUB; USPAT	OR	ON	2010/08/06 16:18
S63	0	(adaptor$1,adapter $1)and event near4 handl$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S64	0	(adaptor$1,adapter $1) and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S65	1	(adaptor$1,adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:46
S66	0	("(adaptor$1,adapter $1)").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/01/21 15:47
S67	1	(adaptor$1,adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:47
S68	26071	gateway and (adaptor$1, adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:48
S69	1973	S68 and event near3 (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:48

S70	916	S68 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S71	7	S70 and (pre $1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:49
S72	247	S70 and trap$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:52
S73	0	"L20" and (pre $1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 15:53
S74	2297	(pre$1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:00
S75	1850	(pre$1selected, designated, default) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S76	1657	(pre$1selected, designated) near2 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01
S77	2124	(pre$1selected, designated) near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:01

S78	5	(pre$1selected) adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:02
S79	33	(pre$designated, pre $1assigned) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:03
S80	2379	(adapter, adaptor) and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:08
S81	354	S80 and trap$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:08
S82	2	S81 and (pre $1selected, designated, default) near3 (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:09
S83	34302	nms and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:13
S84	100	S83 and event adj (handling, management)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S85	0	S84 and (pre $1selected, designated, default) with (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14

S86	0	S84 and (pre $1selected, designated, default) same (adapter, adaptort)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:14
S87	2	S84 and (pre $1selected, designated, default) same (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:16
S88	522	(snmp, xml) near3 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S89	318	S88 and translat$3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:20
S90	41	(snmp, xml) near3 (adapter, adaptor) same translat$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:21
S91	23	S90 and event$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:22
S92	2	S91 and snmp near3 trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:28
S93	2	S91 and event same trap	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/21 16:34

S94	27	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$ or US-20020026533-$ or US-20020184401-$ or US-20100064349-$ or US-20050108387-$ or US-20020143942-$). did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$ or US-6909708-$ or US-5812768-$).did.	US-PGPUB; USPAT	OR	ON	2011/01/25 11:35
S95	14	S94 and (adapter, adaptor) same (software, module $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S96	1	S94 and (adapter, adaptor) same (software near2 module$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:20
S97	6	S94 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/01/25 13:30

EAST Search History (Interference)

<This search history is empty>

1/26/2011 11:25:13 AM
C:\Documents and Settings\gmadamba\My Documents\EAST\Workspaces\10742573_2009-03-24.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011					
	1	✓	✓	✓	-					
	2	✓	✓	✓	-					
	3	✓	✓	✓	-					
	4	✓	✓	✓	-					
	5	✓	✓	✓	-					
	6	✓	✓	✓	-					
	7	✓	✓	✓	-					
	8	✓	✓	✓	-					
	9	✓	✓	✓	-					
	10	✓	✓	✓	-					
	11	✓	✓	-	-					
	12	✓	✓	-	-					
	13	✓	✓	-	-					
	14	✓	✓	-	-					
	15	✓	✓	✓	-					
	16	✓	✓	-	-					
	17	✓	✓	✓	-					
	18	✓	✓	✓	✓					
	19	✓	✓	✓	✓					
	20	✓	✓	✓	✓					
	21	✓	✓	✓	✓					
	22	✓	✓	-	-					
	23	✓	✓	✓	✓					
	24	✓	✓	✓	✓					
	25	✓	✓	-	-					
	26	✓	✓	✓	✓					
	27	✓	✓	-	-					
	28	✓	✓	✓	✓					
	29	✓	✓	✓	-					
	30	✓	✓	-	-					
	31	✓	✓	-	-					
	32	✓	✓	-	-					
	33			✓	✓					
	34			✓	✓					
	35			✓	✓					
	36			✓	-					

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010	01/26/2011					
	37			✓	-					
	38			✓	-					
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	43			✓	✓					
	44				✓					
	45				✓					
	46				✓					
	47				✓					
	48				✓					
	49				✓					
	50				✓					
	51				✓					
	52				✓					
	53				✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

SEARCHED

Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/
RCE with claim amendments and associated remarks received in response to CTFR. New grounds of rejection provided for the amended claim set and Non-final office action sent out as response.	5/12/2010	/GJM/
Claim amendments and remarks received in response to previous action, and deemed persuasive to overcome initial rejection. Updated search performed in EAST, new grounds of rejection and new non-final provided as response.	1/25/2011	/GJM/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/742,573	Confirmation No.:	4061
Applicant:	Zhou, Ellen, *et al.*	Group Art Unit:	2451
Filing Date:	December 19, 2003	Examiner:	Madamba, Glenford J.
Docket No.:	002.P056		
Customer No.:	65638	**AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED AUGUST 17, 2010**	
For:	NETWORK MANAGEMENT SYSTEM	**SUBMITTED THROUGH EFS-WEB**	

AMENDMENT

Dear Sir:

In response to the Office Action mailed August 27, 2010, Applicants respectfully request that the following amendments and remarks be made part of the official record in the above captioned case.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin at page 6 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 17. (Canceled).

18. (Previously Presented) A method of communicating in a network management system, including:

receiving at a first adaptor an indication of an event from a network element, wherein the first adapter is preselected to handle events indicated from the network element and is configured to process information associated with the event based on a first communication protocol;

transferring the first adaptor processed information to an application server in a server cluster according to a load-balancing scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;

receiving at a gateway the application processed information;

receiving at a second adaptor associated with the gateway the application processed information, the second adapter configured to process the application processed information based on a second communication protocol; and

transferring the second adapter processed information to an operation support system.

19. (Previously Presented) The method of claim 18, wherein the first adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events indicated from a group of network elements.

20. (Previously Presented) The method of claim 18, wherein the first adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events indicated from different groups of network elements.

21. (Previously Presented) The method of claim 18, wherein the first adapter is one of a plurality

of adapters, wherein one or more adapters are preselected to handle events indicated from a group of network elements.

22. (Canceled)

23. (Previously Presented) The method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element.

24. (Previously Presented) The method of claim 23, wherein the application server is selected based on the load balancing scheme.

25. (Canceled)

26. (Previously Presented) The method of claim 18, wherein the first adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first adaptor configured to receive ~~information~~ **an indication of an event** from a network element**, wherein the first adapter is preselected to handle events indicated from the network element** and **is** configured to process the information **associated with the event** based on a first communication protocol;

an application server in a server cluster, the application server configured to receive the first adaptor processed information based on a load balancing scheme, the application server also configured to process the first adaptor processed information based on providing to the network element a management service to include ~~at least one of a configuration management service or a security~~ **an event** management service;

a gateway configured to receive the application server processed information; and

a second adaptor associated with the gateway, the second adaptor configured to:

receive the application server processed information,

process the application server processed information based on a second

communication protocol, and

forward the second adaptor processed information to an operation support system (OSS).

29 - 32. (Canceled).

33. (Currently Amended) The method of claim [1] **18**, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (Currently Amended) The method of claim [1] **18**, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (Currently Amended) The method of claim [1] **18**, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

36 – 42. (Canceled).

43. (Previously Presented) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

44. (New) The method of claim 18, wherein the gateway is one of a plurality of gateways.

45. (New) The method of claim 18, wherein the gateway is one of a plurality of physically or logically separate gateways.

46. (New) The method of claim 18, wherein the gateway is a physically and logically separate machine from the application server.

47. (New) The method of claim 18, wherein the first adaptor configured to process information associated with the event based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

48. (New) The method of claim 18, further including the gateway configured to process common functions associated with the application server processed information.

49. (New) The method of claim 18, wherein the indication of the event from the network element is associated with a configuration of the network element.

50. (New) The method of claim 18, wherein the first and second adapters are software modules that are configured to run on Java virtual machines.

51. (New) The method of claim 18, wherein the first and second adapters are configured to communicate with the application server over an RMI interface.

52. (New) The system of claim 28, wherein the application server is preselected to handle information associated with events indicated from the network element.

53. (New) The system of claim 28, wherein the indication of the event from the network element is associated with a configuration of the network element.

REMARKS

The above-referenced patent application has been reviewed in light of the Office Action mailed **August 17, 2010** (the "Action"). In the Action, claims 1-7, 9, 10, 18, 28, 29, 33 and 35-42 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,111,077 to Starkovich *et al.* ("Starkovich") in view of U.S. Patent 5,812,768 to Pageet *et al.* ("Pageet) and in further view of U.S. Patent 7,325,062 to Hamilton II *et al.* ("Hamilton") and U.S. Patent Publication US 2004/0107277 to Levesque *et al.* ("Levesque"). Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and U.S. Patent Publication US 2004/0040030 to Fenton *et al.* ("Fenton"). Claims 15, 17, 19-21, 23, 24, 26 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of U.S. Patent Publication US 2004/0249644 to Scheifer *et al.* ("Scheifer"). Claim 43 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and U.S. Patent Publication US 2003/0093403 to Upton *et al.* ("Upton").

Current Status of Claims:

With this amendment, claims 18-21, 23, 24, 26, 28, 33-35 and 43-53 are pending. Applicants offer to amend claims 28 and 33-35 and add claims 44-53. Also, with this amendment, in addition to previously canceled claims 11-14, 16, 22, 25, 27 and 30-32, Applicants have also canceled claims 1-10, 15, 29 and 36-42. No new matter has been introduced.

Rejection of claims 18, 28 and 33 under 35 U.S.C. §103(a):

A relevant portion of claim 18 is as follows:

> "A method of communicating in a network management system, including:
> receiving at a first adaptor an indication of an event from a network element, *wherein the first adapter is preselected to handle events indicated from the network element and is configured to process information associated with the event* based on a first communication protocol;…"

Emphasis added.

On page 8 of the Action, Examiner states that claim 18 "recites similar limitations to those recited by claims 1 and 10, except for the additional recited feature of wherein the 'information' received at a first adaptor comprises "an indication of an event", as well as providing an "event management service", which is nonetheless expressly disclose[d] by Levesque." First, Applicants respectfully disagree with the comparison of claim 18 with claims 1 and 10. The above-cited portion of claim 18 includes the additional recited feature of "wherein the **first adapter is preselected to handle events indicated from the network element** and is **configured to process information associated with the event**." (Emphasis added)

Second, Applicants submit that Levesque does not expressly disclose the additional recited features as emphasized above for claim 18. The network management system disclosed by Levesque describes network elements that can be grouped, viewed, and manipulated. (See Abstract) Further, Levesque's description of the NETSMART network management system briefly mentions various event management functions such as fault management (see [0127]) or transient condition events (see [1222]). However, Levesque does not expressly or inherently describe the claim 18 feature of "the first adapter preselected to handle events." Further, Levesque appears to contain no description of preselected adapters whatsoever.

Third, the Action on pages 3-5 relies on Starkovich and Pageet to describe adapters. But the Action on page 7 admits that Starkovich and Pageet fail to describe providing certain management services such as event management services to a network element. Also, Starkovich and Pageet do not describe an "adaptor preselected to handle events." Since Starkovich and Pageet are expressly admitted to lacking a description of providing event management services and make no mention of an "adaptor preselected to handle events", Applicants submit that Starkovich and Pageet fail to overcome the above-stated deficiencies of Levesque.

For at least the above-mentioned reasons, Starkovich in view of Pageet and further in view of Levesque do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Hamilton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet and Levesque and Applicants submit that Hamilton fails to cure those deficiencies. Therefore, Applicants request that the rejection of claim 18 be withdrawn. Also, independent claim 28, as amended, includes similar elements to the above-emphasized portion of claim 18.

Further, claim 33 depends from claim 18. Thus, Applicants request that the 35 U.S.C. § 103(a) rejections of independent claim 28 and dependant claim 33 also be withdrawn.

Rejection of claim 8 under 35 U.S.C. §103(a):

Claim 8 has been canceled, so this rejection is moot.

Rejection of claims 19-21, 23, 24, 26 and 34 under 35 U.S.C. §103(a):

In the Action at item 3, claims 19-21, 23, 24, 26 and 34 were among the claims rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and Scheifer. Claims 19-21, 23, 24, 26 and 34 all depend on claim 18. As mentioned above, Starkovich, Pageet, Hamilton and Levesque do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton and Levesque. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich, Pageet, Hamilton and Levesque. Consequently, Starkovich, Pageet, Hamilton, Levesque and Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 19-21, 23, 24, 26 and 34. Therefore, Applicants request that the rejection of claims 19-21, 23, 24, 26 and 34 be withdrawn.

Rejection of claim 43 under 35 U.S.C. §103(a):

In the Action at item 4, claim 43 was rejected as being unpatentable over Starkovich in view of Pageet in view of Hamilton and further in view of Levesque and Upton. Claim 43 depends from claim 18. As mentioned above, Starkovich, Pageet, Hamilton and Levesque do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Upton was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Pageet, Hamilton and Levesque. Further, Applicants submit that Upton fails to cure all of the above-mentioned deficiencies in Starkovich, Pageet, Hamilton and Levesque. Consequently, Starkovich, Pageet, Hamilton, Levesque and Upton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 43. Therefore, Applicants request that the rejection of claim 43 be withdrawn.

Conclusion:

Applicants respectfully submit that claims 18-21, 23, 24, 26, 28, 33-35 and 43-53 are in condition for allowance and such action is earnestly solicited. ***The Examiner is respectfully requested to contact the undersigned by telephone at (503) 551-9442 if it is believed that such contact would further the examination of the present application.***

Respectfully submitted,

Date: November 10, 2010

by: /Ted A. Crawford/Reg. No. 50,610/
Ted A. Crawford
Reg. No. 50,610

Electronic Acknowledgement Receipt

EFS ID:	8812539
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Ted A. Crawford/Lindsey Hunt
Filer Authorized By:	Ted A. Crawford
Attorney Docket Number:	002.P056
Receipt Date:	10-NOV-2010
Filing Date:	19-DEC-2003
Time Stamp:	17:28:36
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant Arguments/Remarks Made in an Amendment	Response_to_OA_10742573_002_P056.pdf	140853 b7d8dc7d936032d787dee41199c660bfe8e5fdcd	no	9

Warnings:	
Information:	

Total Files Size (in bytes):	140853

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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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 11/10/2010	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 22	Minus	** 44	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 2	Minus	***10	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/JAMILAH Z. HARRIS/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	002.P056	4061

65638 7590 08/17/2010

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EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
08/17/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/742,573	ZHOU ET AL.	
	Examiner	Art Unit	
	Glenford Madamba	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,15,17-21,23,24,26,28,29 and 33-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10, 15, 17-21, 23-24, 26, 28-29, 33-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to claim amendments and remarks filed by Applicant's representative on May 18, 2010.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 18, 2010 has been entered.

Response to Amendments

1. With respect to Applicant's amendments filed on May 18, 2010, the claim amendments have been fully considered, but are now considered moot in light of following grounds of rejection provided in this Office Action.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-7, 9, 10, 18, 28, 29, 33 and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1 in view of Pageet et al (hereinafter Pageet), U.S. Patent 5,812,768 and in further view of Hamilton II et al (hereinafter Hamilton), U.S. Patent 7,325,062 B2 and Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1.

As per claims 1, 10, 18, 28 and 29, Starkovich discloses particular features of the invention including the features of a method of communicating in a network management system, comprising the step of “receiving at a gateway (e.g., GGATE 72) [Figs. 2, 3 & 4] the application server processed information” (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] and “transferring the second adapter processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.] to a client” (e.g., Client 0, Client 1, …Client m) [Figs. 1-4 & 8]

But while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited features of the method including receiving at a first adaptor information from a network element, the first adaptor configured to process the information based on a first communication protocol; transferring the first adaptor processed information to an application server; and receiving at a second adaptor associated with the gateway the application server processed information, the second adaptor configured to process the application server processed information based on a second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method including "receiving at a first adaptor 'information' from a network element (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the first adaptor configured to process the information based on a first communication protocol" (e.g., the broker mediates requests from a client workstation

that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]; and "receiving at a second adaptor associated with the gateway the application server processed information (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}], the second adaptor configured to process the application server processed information based on a second communication protocol" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

But while Starkovich and Pageet disclose substantial features of the invention as above, they do not explicitly disclose the additionally recited features of the method including "transferring first adaptor-processed information to an application server in a server cluster based on a load balancing scheme". However, the said feature is taught by Hamilton in a related endeavor.

Hamilton discloses as his invention a method and system for automated adapter reallocation and optimization between logical partitions. Hamilton's invention comprises a Performance Enhancement Program (PEP) that allows an administrator to designate several parameters and identify 'donor' and 'recipient' adapter candidates, and wherein a Reallocation Program (RP) compiles performance data of the adapters [Abstract] [Fig. 4]. Specifically, Hamilton discloses the additionally recited features of the method including transferring the adaptor processed information to an application server in a server cluster according to a load balancing scheme" (" (e.g., Hamilton: e.g., Dynamic Partitioning of resources in a 'Cluster Computing Environment') [col 2, L19-20] (e.g., monitoring performance parameters of all I/O adapters and/or each individual subclass of adapters) [col 3, L33 – 58] (e.g., 'Load-balanced Adapters') [col 3, L65 – col 4, 15] [Figs. 5-8].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Pageet, with the above said feature, as disclosed by Hamilton, for the motivation of providing both a system and method to automate the control and movement of resources in a dynamic logical partitioning environment [col 1, L67 – col 2, L2].

Further, while the combination of Starkovich, Pageet and Hamilton disclose substantial features of the invention as above, the combination does not explicitly disclose the additional recited feature of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the network element a management service to include at least one of a configuration management service or a security management service". Nevertheless, the said feature is disclosed by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited feature of the method wherein the application server is configured to process the first adaptor processed information "based on providing to the network element a management service to include at least *one* of a configuration management service or a security management service" (e.g., Levesque discloses NETSMART, which is a true carrier-class network management system {NMS} that combines the functions of both the element management and network management layers of the Telecommunications Management network model to provide comprehensive management capabilities to users) [0073] [0085] (e.g., NETSMART provides Configuration Management features to support easy and rapid provisioning and inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed

by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claim 10 recites similar limitations as claim 1, except for the additional recited feature of an adaptor associated with a gateway receiving information "from an Operations Support System", which is nonetheless expressly disclosed by Levesque (e.g., 'Operational Support System') [0172].

Claim 18 recites similar limitations as those recited by claims 1 and 10, except for the additional recited feature of wherein the 'information' received at a first adaptor comprises "an indication of an event", as well as providing an "event management service", which is nonetheless expressly disclose by Levesque (e.g., 'Event Services') [Figure 34] (e.g., Fault Management) [0127] (e.g. Transient condition Events) [1222].

Claim 28 recites similar limitations as those recited by claims 1 and 10, is distinguishable only by its statutory category (network management system), and accordingly rejected on the same basis as the previously rejected claims 1 and 10.

Claim 29 recites the same limitations as claims 1 and 10 or 28, but operates in the opposite direction, which is nonetheless also expressly disclosed by Starkovich (e.g., discloses 'bidirectional' communication between the network element / client, adapter(s), gateway(s) and application server) [Figs. 1-3].

As per claim 2, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 3, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 4, Starkovich discloses the method of claim 1, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claims 5 and 38, while Starkovich discloses substantial features of the invention as above for claim 1, he does not explicitly disclose the additionally recited features of the method wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages. However, the said feature is taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational

communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having *different network architectures and associated communications protocols* " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server into commonly formatted messages" (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Functional Specific Protocol {FSP}) [col 48, L10-18]; "transferring the 'first adaptor processed information' to an application server (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}]..

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous

computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

As per claim 6, Starkovich discloses the method of claim 1, further including the gateway configured to process common functions associated with the application server processed information (e.g., the gateway converts the service request to a format acceptable by an Enterprise Server) [Abstract] [Figs. 2-5, 8 & 9] (e.g., the gate interfaces with the connector and finally the service is performed on the mainframe…") (e.g., "GGate and XGate and their adapters support pass through requests…) [col 4, L8-62] [col 11, L7-16].

As per claim 7, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as in claim 1, they not explicitly disclose the additional recited feature of the method "wherein the information from the network element is associated with a configuration of the network element". However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited feature of the method "wherein the information from the network element is associated with a configuration of the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Configuration Management' features to support easy and rapid provisioning and

inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 9, Starkovich discloses the method of claim 1, wherein the first and second adapters communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

As per claims 33 and 39, while Starkovich discloses substantial features of the invention as above for claim 1, he does not explicitly disclose the additionally recited features of the method wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol. However, the said features are taught by Pageet in a related endeavor.

Pageet discloses as his invention an object interface that supports three modes of inter-object communication: message processing ('store and forward'), conversational

communication, and remote procedure call [Abstract] [Figs. 2, 3b, 4, 5a-b & 6]. As part of his invention, Pageet teaches that "a service broker manages service requests from a plurality of client and servers, which may reside on different hardware platforms and operating systems, and may be connected to computer networks having 'different network architectures and associated communications protocols' " [col 3, L32-43].

Specifically, Pageet discloses the additionally recited features of the method "wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol" (Pageet: e.g., 'DCE, DDE and or LU6.2 Adapters') [Figs. 7g & 8-9] [col 47, L59 – col 48, L50] (e.g. '1st / 2nd Broker Adaptor') [col 47, L59 – col 48, L50] [also col 53, L32-61 {Claim 1} & col 54, L8-27 {Claim 7}] (e.g., the broker mediates requests from a client workstation that runs on a workstation using DDE protocol for communication and refers the request to an appropriate server is a UNIX environment that uses DCE/RPC for communication, for example) [col 48, L4-9] (e.g,. Non-Functional Specific Protocol {FSP} / 'foreign protocol') [col 48, L10-18].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Pageet, for the motivation and/or advantage of providing a system that facilitates cooperative processing among application programs in a heterogeneous

computing environment and that provides store-and-forward messaging, conversational program-to-program communication and remote procedure calls [Pageet: col 3, L17-24].

Claim 39 recites similar limitations as those recited by claim 33 and is accordingly rejected on the same basis.

As per claims 35 and 40, Starkovich discloses the method of claim 1, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1) (e.g., XML) [Abstract] (e.g., CORBA _352) [Fig. 4].

Claim 40 recites similar limitations as those recited by claim 35 and is accordingly rejected on the same basis.

As per claim 36 and 41, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as in claim 1, they not explicitly disclose the additional recited feature of the method “wherein the configuration management service comprises at least one of discovering, configuring, or provisioning the network element”. However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract].

Specifically, Levesque discloses the additional recited feature of the method "wherein the configuration management service comprises at least one of discovering, configuring, or provisioning the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Configuration Management' features to support easy and rapid provisioning and inventory management for both individual Network Elements and entire transport networks [0097-0098].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claim 41 recites similar limitations as those recited by claim 36 and is accordingly rejected on the same basis.

As per claim 37 and 42, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as in claim 1, they not explicitly disclose the additional recited feature of the method "wherein the security management service comprises at least one of maintaining information associated with a user of the network element to include access rights of the user or performing security auditing of the network element". However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additional recited feature of the method "wherein the security management service comprises at least one of maintaining information associated with a user of the network element to include access rights of the user or performing security auditing of the network element" (Levesque: e.g., expressly discloses NETSMART, which provides 'Security Management' features which allow quick and accurate administration of user privileges and/or user profiles for customization of user roles)[0150-0155].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said additional feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claim 42 recites similar limitations as those recited by claim 37 and is accordingly rejected on the same basis.

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 8, while the combination discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the first and second adapters are software modules that are configured to run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (Fenton: e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [Fenton: 0001-002].

3. Claims 15, 17, 19-21, 23-24, 26 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 15, 24 and 34, while the combination of Starkovich, Pageet, Hamilton and Levesque discloses substantial features of the invention as in claim 10, they do not explicitly disclose the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including the additional recited feature of the method wherein the load balancing scheme is based on selecting the application server according to the application server having the lightest load in the server cluster (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing'). In this regard, it would be obvious to select the server with the light load in the cluster, as is well-known in 'load-balanced' cluster networks.

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

Claims 24 and 34 recite similar limitations as those recited by claim 15 and are accordingly rejected on the same basis.

As per claim 17, while the combination of Starkovich, Pageet, Hamilton and Levesque discloses substantial features of the invention as in claim 10, none explicitly discloses the additional recited feature of the method wherein the application server is a server instance in the J2EE application server architecture. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method wherein the application server is a server instance in the J2EE application server architecture (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing').

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

As per claims 19, 20 and 21, while the combination of Starkovich, Pageet and Hamilton discloses substantial features of the invention as above for claim 18, they do not explicitly disclose the additionally recited feature of the method wherein the first adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements (Levesque: e.g, a 'network element management system' wherein network elements can be 'grouped', viewed and manipulated according to groups) [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich, Pageet and Hamilton with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claims 20 and 21 recites similar limitations as claim 19 and are accordingly rejected on the same basis.

As per claim 23, Starkovich discloses the method of claim 18, wherein the application server is preselected to handle information associated with events indicated from the network element [Figs. 1-5].

As per claim 26, Starkovich discloses the method of claim 18, wherein the first adapter is on a separate physical machine from the application server [Figs. 1-5].

4. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Pageet in view of Hamilton and in further view of Levesque and Upton et al (hereinafter Upton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 43, while the combination of Starkovich, Pageet, Hamilton and Levesque discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element. However, the feature is taught by Upton in a related endeavor.

Upton discloses as his invention system and method for implementing an event adapter [Abstract] [Fig. 1]. Specifically, Upton discloses the additionally recited feature of the method wherein the event management service comprises at least one of

collecting, recording, or publishing the event for use by the operation support system to manage the network element (Upton: e.g., 'Publish Event') [Fig. 1].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination with the above said feature, as disclosed by Upton, for the motivation of providing a method and system and integration solution that is easy to use, affordable and based on industry standards, and also has universal connectivity, capable of massive scalability and has accessible business process tools [Upton: 0016] [0021].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2451

Notice of References Cited	Application/Control No. 10/742,573	Applicant(s)/Patent Under Reexamination ZHOU ET AL.	
	Examiner Glenford Madamba	Art Unit 2451	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,812,768	09-1998	Page et al.	709/228
*	B	US-2003/0093403	05-2003	Upton, Mitch	707/1
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010						
	1	✓	✓	✓						
	2	✓	✓	✓						
	3	✓	✓	✓						
	4	✓	✓	✓						
	5	✓	✓	✓						
	6	✓	✓	✓						
	7	✓	✓	✓						
	8	✓	✓	✓						
	9	✓	✓	✓						
	10	✓	✓	✓						
	11	✓	✓	-						
	12	✓	✓	-						
	13	✓	✓	-						
	14	✓	✓	-						
	15	✓	✓	✓						
	16	✓	✓	-						
	17	✓	✓	✓						
	18	✓	✓	✓						
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	29	✓	✓	✓						
	30	✓	✓	-						
	31	✓	✓	-						
	32	✓	✓	-						
	33			✓						
	34			✓						
	35			✓						
	36			✓						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	**Art Unit**
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010	08/12/2010						
	37			✓						
	38			✓						
	39			✓						
	40			✓						
	41			✓						
	42			✓						
	43			✓						

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

SEARCHED

Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/
RCE with claim amendments and associated remarks received in response to CTFR. New grounds of rejection provided for the amended claim set and Non-final office action sent out as response.	5/12/2010	/GJM/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:24
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57

S8	2	S4 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:02
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16

S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:00
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01

S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:06
S26	106	jvm same (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13

S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28

S42	17	gateway and load $1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:37
S43	48	load$1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S44	31	S43 not S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S45	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$ or US-7325062-$ or US-7058758-$).did.	US-PGPUB; USPAT	OR	ON	2010/08/06 12:30
S46	1	S45 and (configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31

S47	215	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:31
S48	40079	(configuration, security) near3 (management, service$1)	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:31
S49	61	S47 and S48	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S50	86208	(configuration, security) near3 (management, service$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S51	61	S47 and S50	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2010/08/06 12:32
S52	149	S47 and S50	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:32
S53	56	S52 and (first, second) near4 protocol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S54	0	S53 and rmi adj interface	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33
S55	7	S53 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:33

S56	14	S53 and (oss, corba, cluster, mib)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:35
S57	56	S53 and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 12:38
S58	124	SNMP near5 (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S59	72	SNMP near2 (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S60	37	SNMP adj (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/08/06 13:22
S61	20	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$ or US-20040205250-$ or US-20020091786-$).did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-	US-PGPUB; USPAT	OR	ON	2010/08/06 16:15

		6757899-$ or US-7325062-$ or US-7058758-$).did.				
S62	8	S61 and operation$3 near3 (support, service$1)	US-PGPUB; USPAT	OR	ON	2010/08/06 16:18

EAST Search History (Interference)

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8/12/2010 2:32:55 PM
C:\Documents and Settings\gmadamba\My Documents\EAST\Workspaces\10742573_2009-03-24.wsp

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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 contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	10/742,573	Filing Date	2003-12-19	Docket Number (if applicable)	002.P056	Art Unit	2451
First Named Inventor	Zhou, Ellen			Examiner Name	Madamba, Glenford J.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☒ Amendment/Reply
- ☐ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No _____

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
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 contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Ted A. Crawford/	Date (YYYY-MM-DD)	2010-05-18
Name	Ted A. Crawford	Registration Number	50610

This collection of information is required by 37 CFR 1.114. 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 12 minutes 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.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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 the Freedom of Information Act requires disclosure of these records.

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 another 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 inspections 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.

Electronic Patent Application Fee Transmittal

Application Number:	10742573
Filing Date:	19-Dec-2003
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Filer:	Ted A. Crawford/Lindsey Hunt
Attorney Docket Number:	002.P056

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
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($)
Miscellaneous:				
Request for continued examination	1801	1	810	810
		Total in USD ($)		**810**

Electronic Acknowledgement Receipt

EFS ID:	7637858
Application Number:	10742573
International Application Number:	
Confirmation Number:	4061
Title of Invention:	Network management system
First Named Inventor/Applicant Name:	Eileen Zhou
Customer Number:	65638
Filer:	Ted A. Crawford/Lindsey Hunt
Filer Authorized By:	Ted A. Crawford
Attorney Docket Number:	002.P056
Receipt Date:	18-MAY-2010
Filing Date:	19-DEC-2003
Time Stamp:	17:45:13
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$810
RAM confirmation Number	15144
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1	Amendment Submitted/Entered with Filing of CPA/RCE	RCE_Response_10_742573_002_P056.pdf	146367 a6ebaa4c5be82da7a07c497b0b521458818ff473	no	13
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	RCE_002_P056.pdf	797419 a6051c49c0dce81492ef2e64add21188451bc579	no	3
Warnings:					
Information:					
3	Fee Worksheet (PTO-875)	fee-info.pdf	30062 0eb0772b9caaf5f1103ab80b4117bcc8929595b0	no	2
Warnings:					
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		Total Files Size (in bytes):	973848		

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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.

National Stage of an International Application under 35 U.S.C. 371

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.

New International Application Filed with the USPTO as a Receiving Office

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	10/742,573	Confirmation No.:	4061
Applicant:	Zhou, Ellen, *et al.*	Group Art Unit:	2451
Filing Date:	December 19, 2003	Examiner:	Madamba, Glenford J.
Docket No.:	002.P056		
Customer No.:	65638	**RCE, AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION MAILED MARCH 2, 2010**	
For:	NETWORK MANAGEMENT SYSTEM	**SUBMITTED THROUGH EFS-WEB**	

REQUEST FOR CONTINUED EXAMINATION

Dear Sir:

In response to the Final Office Action mailed March 2, 2010, Applicants submit a Request for Continued Examination (RCE). Applicants also respectfully request that the following amendment be made part of the official record in the above captioned case.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin at page 9 of this paper.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of communicating in a network management system, including:

receiving at a first adaptor information from a network element, the first adaptor configured to process the information based on a first communication protocol;

transferring the first adaptor processed information to an application server in a server cluster based on a load balancing scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include at least one of a configuration management service or a security management service;

~~transferring~~ **receiving at a gateway the application server processed** information ~~**from an application server in a server cluster to a gateway that processes the information**~~;

~~**transferring**~~ **receiving at a second adaptor associated with** the gateway **the application server** processed information ~~**from the gateway to a plurality of adapters according to a load balancing scheme associated with the gateway**~~**, the second adapter configured to** ~~that~~ process the ~~**gateway**~~ **application server** processed information **based on a second communication protocol**; and

transferring the **second** adapter processed information ~~**from one of the adapters**~~ to a client.

2. (Original) The method of claim 1, wherein the gateway is one of a plurality of gateways.

3. (Original) The method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways.

4. (Original) The method of claim 1, wherein the gateway is a physically and logically separate machine from the application server.

5. (Currently Amended) The method of claim 1, wherein the ~~adapters~~ **first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to** convert ~~protocol specific messages into~~ commonly formatted messages **associated with the first communication protocol into protocol specific messages associated with the application server**.

6. (Currently Amended) The method of claim 1, further including **the gateway configured to process** ~~processing~~ common functions associated with the **application server processed** information ~~before transferring the information to the adapters~~.

7. (Currently Amended) The method of claim 1, wherein the information **from the network element** is associated with ~~an event that originated on~~ a **configuration of the** network element.

8. (Currently Amended) The method of claim 1, wherein the **first and second** adapters are software modules that **are configured to** run on Java virtual machines.

9. (Currently Amended) The method of claim 1, wherein the **first and second** adapters **are configured to** communicate with the application server over an RMI interface.

10. (Currently Amended) A method of communicating in a network management system. including:

~~transferring~~ **receiving at a first adaptor associated with a gateway** information from an operations support system ~~to a plurality of adapters associated with a gateway~~**, the first adaptor configured to process the information based on a first communication protocol**;

transferring the **first adaptor processed** information ~~from the adapters~~ to the gateway; ~~and~~

transferring the **first adaptor processed** information ~~from the gateway~~ to an application server in a server cluster according to a load balancing scheme[.]**, the application server configured to process the first adaptor processed information based on providing a management service for the operations support system to include at least one of a configuration management service or a security management service;**

receiving at a second adaptor the application server processed information, the second adaptor configured to process the application server processed information based on a second communication protocol; and

transferring the second adaptor processed information to a network element.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Currently Amended) The method of claim 10 ~~**or 12**~~, wherein the load balancing scheme is based on selecting the **application** server ~~**with**~~ **according to the application server having** the lightest load **in the server cluster**.

16. (Canceled)

17. (Currently Amended) The method of claim 10 ~~**or 12**~~, wherein the application server is a server instance in the J2EE application server architecture.

18. (Currently Amended) A method of communicating in a network management system, including:

~~**communicating**~~ **receiving at a first adaptor an indication of** an event from a network element ~~**to a configured adapter,**~~ wherein the ~~**configured**~~ **first** adapter is preselected to handle events **indicated** from the network element **and is configured to process information associated with the event based on a first communication protocol**; ~~**and**~~

transferring **the first adaptor processed** information ~~**associated with the event from the configured adapter**~~ to an application server in a server cluster according to a load-balancing ~~**scheme.**~~ **scheme, the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service;**

receiving at a gateway the application processed information;

receiving at a second adaptor associated with the gateway the application processed information, the second adapter configured to process the application processed information based on a second communication protocol; and

transferring the second adapter processed information to an operation support system.

19. (Currently Amended) The method of claim ~~17~~ **18**, wherein the **first** adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events **indicated** from a group of network elements.

20. (Currently Amended) The method of claim ~~17~~ **18**, wherein the **first** adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events **indicated** from different groups of network elements.

21. (Currently Amended) The method of claim ~~17~~ **18**, wherein the **first** adapter is one of a plurality of adapters, wherein one or more adapters ~~is~~ **are** preselected to handle events **indicated** from a group of network elements.

22. (Canceled)

23. (Currently Amended) The method of claim ~~17~~ **18**, wherein the application server is preselected to handle **information associated with** events **indicated** from the network element.

24. (Currently Amended) The method of claim ~~17~~ **23**, wherein the application server is selected based on [**a**] **the** load balancing scheme.

25. (Canceled)

26. (Currently Amended) The method of claim ~~17~~ **18**, wherein the **first** adapter is on a separate physical machine from the application server.

27. (Canceled)

28. (Currently Amended) A network management system, including:

a first adaptor configured to receive information from a network element and configured to process the information based on a first communication protocol;

an application server in a server cluster, the application server configured to receive the first adaptor processed information based on a load balancing scheme, the application server also configured to process the first adaptor processed information based on providing to the network element a management service to include at least one of a configuration management service or a security management service;

a gateway configured to receive **the application server processed** information ~~**from an application server in a server cluster**~~; **and**

a ~~**plurality of adapters**~~ **second adaptor associated with the gateway, the second adaptor** configured ~~**to**~~ **to:**

receive the **application server processed** information**,** ~~**from the gateway according to a load balancing scheme;**~~

process the application server processed information based on a second communication protocol, and

forward the second adaptor processed information to an operation support system (OSS).

~~**an OSS configured to receive the information from the adapters;**~~

~~**wherein the adapters are associated with the gateway.**~~

29. (Currently Amended) A network management system, including:

a **first adaptor** ~~**plurality of adapters**~~ configured to receive information from an **operation support system (OSS)** ~~**OSS**~~ **and also configured to process the information based on a first communication protocol**;

a gateway **associated with the first adaptor** configured to receive the **first adaptor processed** information ~~**from the adapters**~~; and

an application server in a server cluster**, the application server** configured to receive the **first adaptor processed** information ~~**from the gateway**~~ according to a load-balancing scheme**, the application server also configured to process the first adaptor processed information**

based on providing a management service for the operations support system to include at least one of a configuration management service or a security management service; **and**

~~**wherein the adapters are associated with the gateway.**~~

a second adaptor configured to:

receive the application server processed information,

process the application server processed information based on a second communication protocol, and

forward the second adaptor processed information to a network element.

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (New) The method of claim 1, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

34. (New) The method of claim 1, wherein the load balancing scheme selects the application server based on the application server having the lightest load in the server cluster.

35. (New) The method of claim 1, wherein the first communication protocol and the second communication protocol include one or more communication protocols associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

36. (New) The method of claim 7, wherein the configuration management service comprises at least one of discovering, configuring, or provisioning the network element.

37. (New) The method of claim 1, wherein the security management service comprises at least one of maintaining information associated with a user of the network element to include access rights of the user or performing security auditing of the network element.

38. (New) The method of claim 10, wherein the first adaptor configured to process the information based on the first communication protocol comprises the first adaptor configured to convert commonly formatted messages associated with the first communication protocol into protocol specific messages associated with the application server.

39. (New) The method of claim 10, wherein the second adaptor configured to process the application server processed information based on the second communication protocol comprises the second adaptor configured to convert protocol specific messages associated with the application server into commonly formatted messages associated with the second communication protocol.

40. (New) The method of claim 10, wherein the first communication protocol and the second communication protocol include at least one communication protocol associated with one of Extended Markup Language (XML), Simple Network Management Protocol (SNMP), Common Object Request Broker Architecture (COBA) or Transaction Language 1 (TL1).

41. (New) The method of claim 10, wherein the configuration management service comprises at least one of discovering, configuring, or provisioning the network element.

42. (New) The method of claim 10, wherein the security management service comprises at least one of maintaining information associated with a user of the network element to include access rights of the user or performing security auditing of the network element.

43. (New) The method of claim 18, wherein the event management service comprises at least one of collecting, recording, or publishing the event for use by the operation support system to manage the network element.

REMARKS

The above-referenced patent application has been reviewed in light of the Final Office Action mailed **March 2, 2010** (the "Action"). In the Action, claims 1-5, 6 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 7,111,077 to Starkovich *et al.* ("Starkovich") in view of U.S. Patent 7,325,062 to Hamilton II *et al.* ("Hamilton"). Claims 7, 10, 12, 14, 16, 18, 22, 28 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Hamilton and further in view of U.S. Patent Publication US 2004/0107277 to Levesque *et al.* ("Levesque"). Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Hamilton and further in view of U.S. Patent Publication US 2004/0040030 to Fenton *et al.* ("Fenton"). Claims 11, 13, 15 and 30-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Hamilton and further in view of U.S. Patent Publication US 2004/0249644 to Scheifer *et al.* ("Scheifer"). Claims 17, 19-21, 23-27 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Starkovich in view of Hamilton and further in view of Levesque and Scheifer.

Current Status of Claims:

With this amendment, claims 1-10, 15, 17-21, 23, 24, 26, 28, 29 and 33-43 are pending. Applicants offer to amend claims 1, 5-10, 15, 17-21, 23, 24, 26, 28 and 29. Applicants also have canceled claims 11-14, 16, 22, 25, 27 and 30-32 and have added claims 33-43. No new matter has been introduced.

Preliminary Matter:

In the Response submitted by Applicants on October 16, 2009, the Listing of Claims section incorrectly indicated that claims 2-9, 12, 14-17 and 19-27 were "previously presented." The file history for Applicants' application does not appear to indicate that these claims were previously amended. Applicants submit that claims 2-9, 12, 14-17 and 19-27 should have been identified as original claims in the Listing of Claims section of the October 16, 2009 Response. Consequently, with this Response, claims 2-4 are the only claims of the above-mentioned original claims that have not been amended or canceled and are thus identified as "original" rather than "previously presented".

Rejection of claims 1-5, 6 and 9 under 35 U.S.C. §103(a):

Claim 1, as amended, is as follows:

> "A method of communicating in a network management system, including:
> receiving at a first adaptor information from a network element, the first adaptor configured to process the information based on a first communication protocol;
> transferring the first adaptor processed information to an application server in a server cluster based on a load balancing scheme, *the application server configured to process the first adaptor processed information based on providing to the network element a management service to include at least one of a configuration management service or a security management service*;
> receiving at a gateway the application server processed information;
> receiving at a second adaptor associated with the gateway the application server processed information, the second adapter configured to process the application server processed information based on a second communication protocol; and
> transferring the second adapter processed information to a client."

Emphasis added.

Starkovich does not describe the above-emphasized elements of claim 1. Starkovich describes distributed transaction processing systems 54 and 56 that are intended to encompass **transaction** manager software. (See Col. 6, lines 44-46). Further, Starkovich describes a **transaction** manager 317 that "includes: 1) a **transaction** monitor, which executes and routes **transactions**, performs load balancing, and recovers **transactions** after failures and 2) A communications resource manager (CRM), which controls communications among distributed applications." (See Col. 9, lines 20-26; emphasis added). Applicants submit that the transaction manager described by Starkovich is focused purely on **managing transactions** to be processed by processing system 54 or processing system 56. In contrast, the emphasized portion of claim 1 indicates that the application server is configured to provide a management service to include at least one of **configuration** management services or **security** management services. Therefore, Starkovich does not disclose or suggest at least the above-emphasized portions of claim 1.

For at least the above-mentioned reasons, Starkovich does not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 1. Hamilton was not cited in the Action to address the above-mentioned deficiencies in Starkovich and Applicants submit that Hamilton fails to cure the deficiencies in Starkovich to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 1. Therefore, Applicants request that the rejection of claim 1 be withdrawn. Also, claims 2-5 and 9 depend from claim 1. Thus, Applicants request that the 35 U.S.C. § 103(a) rejections of claims 2-5 and 9 also be withdrawn.

Rejection of claims 7, 10, 18, 28 and 29 under 35 U.S.C. §103(a):

In the Action at item 2, claims 7, 10, 18, 28 and 29 were among the claims rejected as being unpatentable over Starkovich in view of Hamilton and further in view of Levesque. The Action also indicated that the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1 and cited Levesque as describing additional elements of claims 7, 10, 18, 28 and 29.

Claims 7, 10, 28 and 29 include similar elements that were emphasized above for claim 1. As mentioned above, Starkovich and Hamilton do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 1. Levesque was not cited in the Action to address the above-mentioned deficiencies in Starkovich and Hamilton. Further, Applicants submit that Levesque fails to cure the above-mentioned deficiencies in Starkovich and Hamilton. Consequently, Starkovich in view of Hamilton and further in view of Levesque fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 7, 10, 28 and 29. Therefore, Applicants request that the rejection of claims 7, 10, 28 and 29 be withdrawn.

Claim 18 includes "the application server configured to process the first adaptor processed information based on providing to the network element a management service to include an event management service". Similar to what was mentioned above for claim 1, Applicants submit that the transaction manager described by Starkovich also does not describe **providing to the network element a management service to include an event management service**. Also, both Hamilton and Levesque fail to cure the above-mentioned deficiencies in Starkovich. Consequently, Starkovich in view of Hamilton and further in view of Levesque fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 18. Therefore, Applicants request that the rejection of claim 18 also be withdrawn.

Rejection of claim 8 under 35 U.S.C. §103(a):

In the Action at item 3, claim 8 was rejected as being unpatentable over Starkovich in view of Hamilton and further in view of Fenton. The Action also indicated that the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1 and cited Fenton as describing additional elements of claim 8. As mentioned above, Starkovich and Hamilton do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 1. Fenton was not cited in the Action to address the above-mentioned deficiencies in Starkovich and Hamilton. Further, Applicants submit that Fenton fails to cure the above-mentioned deficiencies in Starkovich and Hamilton. Consequently, Starkovich in view of Hamilton and further in view of Fenton fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 8. Therefore, Applicants request that the rejection of claim 8 be withdrawn.

Rejection of claim 15 under 35 U.S.C. §103(a):

In the Action at item 4, claim 15 was among the claims rejected as unpatentable over Starkovich in view of Hamilton and further in view of Scheifer. The Action also indicated that the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1 and cited Scheifer as describing additional elements of claim 15. As mentioned above, Starkovich and Hamilton do not support a *prima facie* 35 U.S.C. §103(a) rejection of claim 1. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich and Hamilton. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich and Hamilton. Consequently, Starkovich in view of Hamilton and further in view of Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claim 15. Therefore, Applicants request that the rejection of claim 15 be withdrawn.

Rejection of claims 17, 19-21, 23, 24 and 26 under 35 U.S.C. §103(a):

In the Action at item 5, claims 17, 19-21, 23, 24 and 26 were among the claims rejected as being unpatentable over Starkovich in view of Hamilton and further in view of Levesque and Scheifer. Claims 17, 19-21, 23, 24 and 26 depend from one of claims 10 or 18. As mentioned above, Starkovich in view of Hamilton and further in view of Levesque fail to support a *prima*

facie 35 U.S.C. §103(a) rejection of claims 10 and 18. Scheifer was not cited in the Action to address the above-mentioned deficiencies in Starkovich, Hamilton and Levesque. Further, Applicants submit that Scheifer fails to cure the above-mentioned deficiencies in Starkovich, Hamilton and Levesque. Consequently, Starkovich in view of Hamilton and further in view of Levesque and Scheifer fail to support a *prima facie* 35 U.S.C. §103(a) rejection of claims 17, 19-21, 23, 24 and 26. Therefore, Applicants request that the rejection of claims 17, 19-21, 23, 24 and 26 be withdrawn.

Conclusion:

Applicants respectfully submit that claims 1-10, 15, 17-21, 23, 24, 26, 28, 29 and 33-43 are in condition for allowance and such action is earnestly solicited. ***The Examiner is respectfully requested to contact the undersigned by telephone at (503) 551-9442 if it is believed that such contact would further the examination of the present application.***

Respectfully submitted,

Date: May 18, 2010

by: /Ted A. Crawford/Reg. No. 50,610/
Ted A. Crawford
Reg. No. 50,610

PTO/SB/06 (07-06)
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PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY ☐ FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 05/18/2010

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 32	Minus	** 44	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 5	Minus	***10	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/BRENDA WEBB/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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PATENT APPLICATION FEE DETERMINATION RECORD

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Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 05/18/2010

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 32	Minus	** 44	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 5	Minus	***10	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/BRENDA WEBB/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NUMBER	PATENT NUMBER	GROUP ART UNIT	FILE WRAPPER LOCATION
10/742,573		2451	

OC0000000040712455

Correspondence Address/Fee Address Change

The following fields have been set to Customer Number 65638 on 03/18/2010

- **Correspondence Address**
- **Power of Attorney Address**

The address of record for Customer Number 65638 is:

65638
OMIKRON IP LAW GROUP
16325 Boones Ferry Rd.
SUITE 204
LAKE OSWEGO, OR 97035

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	HAMMP004

CONFIRMATION NO. 4061

65638
OMIKRON IP LAW GROUP
16325 Boones Ferry Rd.
SUITE 204
LAKE OSWEGO, OR 97035

POA ACCEPTANCE LETTER

OC00000040627244

Date Mailed: 03/16/2010

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 03/05/2010.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/hchristian/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

☑ Practitioners associated with the Customer Number: 65638

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

☑ The address associated with Customer Number: 65638

OR

☐ Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address:

Brixham Solutions Ltd.
OMC Chambers, Wickhams Cay 1, Road Town,
Tortola, British Virgin Islands

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record
The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date
Name	Anna C. Picchi	Telephone
Title	Authorized Person	

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. 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 3 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Brixham Solutions Ltd.

Application No./Patent No.: 10/742,573 Filed/Issue Date: 12/19/2003

Titled: NETWORK MANAGEMENT SYSTEM

Brixham Solutions Ltd. , a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. [X] the assignee of the entire right, title, and interest in;

2. [ ] an assignee of less than the entire right, title, and interest in (The extent (by percentage) of its ownership interest is _____ %); or

3. [ ] the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. [ ] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy therefore is attached.

OR

B. [X] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Zhou, Eileen, et al. To: Hammerhead Systems

The document was recorded in the United States Patent and Trademark Office at Reel 014401, Frame 0969, or for which a copy thereof is attached.

2. From: Hammerhead Systems, Inc. To: Brixham Solutions Ltd.

The document was recorded in the United States Patent and Trademark Office at Reel 023810, Frame 0916, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

[ ] Additional documents in the chain of title are listed on a supplemental sheet(s).

[ ] As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Ted Crawford 3/5/10

Signature Date

Ted A. Crawford Authorized Attorney

Printed or Typed Name Title

This collection of information is required by 37 CFR 3.73(b). 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 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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16325 Boones Ferry Road Suite 204
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P: 503.719.9473
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To:	USPTO
Fax Number:	(571) 273-8300
Phone Number:	
From:	Lindsey Hunt
Fax Number:	(503) 305-6760
Phone Number:	(503) 719-9473
Date:	March 5, 2010
Pages including this cover page:	3

Please find attached the following:

Power of Attorney to Prosecute Application Before the USPTO appointing Customer Number 65638

Statement Under 37 CFR 3.73(b) for Application No. 10/742,573

CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence (along with any paper referred to as being attached or enclosed) is being facsimile transmitted to the United States Patent and Trademark Office (Fax No. (571) 273-8300 on March 5, 2010.

March 5, 2010
Date

Lindsey Hunt
Signature

Lindsey Hunt
Typed or printed name of person signing Certificate

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	HAMMP004	4061

21912 7590 03/02/2010

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

EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
03/02/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/742,573	ZHOU ET AL.	
	Examiner	Art Unit	
	Glenford Madamba	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to remarks and claim amendments filed by Applicant's representative on October 16, 2009.

Response to Remarks and Amendments

1. Applicant's remarks and claim amendments filed on October 16,, 2009 have been considered, but are now moot in light of the new grounds of rejection provided with this action.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-5, 6 and 9 are rejected under 35 U.S.C. 102(e) as being unpatentable over Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1 in view of Hamilton II et al (hereinafter Hamilton), U.S. Patent 7,325,062 B2.

As per claim 1, Starkovich discloses a method of communicating in a network management system, including:

transferring information from an application server in a server cluster (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] to a gateway (e.g., GGATE 72) that processes the information [Figs. 2 & 3];

transferring the gateway processed information from the gateway (e.g., GGATE 72) to a plurality of adapters according to a load balancing scheme associated with the gateway that process the gateway processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.]; and

transferring the adapter processed information from one of the adapters to a client (e.g., Client 0, Client 1, …Client m) [Figs. 2 & 3] [Fig. 8].

As per claim 1, Starkovich discloses substantial features of the invention including the recited features of a method of communicating in a network management system, including “transferring information from an application server (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] to a gateway (e.g., GGATE 72) that processes the information” [Figs. 2 & 3]; “transferring the gateway processed information from the gateway (e.g., GGATE 72) to a plurality of adapters associated with the gateway that process the gateway processed information” (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.]; and “transferring the adapter processed information from one of the adapters to a client” (e.g., Client 0, Client 1, …Client m) [Figs. 2 & 3] [Fig. 8].

But while Starkovich discloses substantial features of the invention as above, he does not explicitly disclose the additionally recited features of the method including transferring information from an application server "in a server cluster" and transferring the gateway processed information from the gateway to a plurality of adapters "according to a load balancing scheme". However, the said features are taught by Hamilton in a related endeavor.

Hamilton discloses as his invention a method and system for automated adapter reallocation and optimization between logical partitions. Hamilton's invention comprises a Performance Enhancement Program (PEP) that allows an administrator to designate several parameters and identify 'donor' and 'recipient' adapter candidates, and wherein a Reallocation Program (RP) compiles performance data of the adapters [Abstract] [Fig. 4]. Specifically, Hamilton discloses the additionally recited features of the method including transferring information from an application server "in a server cluster" (e.g., Hamilton: e.g., Dynamic Partitioning of resources in a 'Cluster Computing Environment') [col 2, L19-20] and transferring the gateway processed information from the gateway to a plurality of adapters "according to a load balancing scheme" (Hamilton: e.g., monitoring performance parameters of all I/O adapters and/or each individual subclass of adapters) [col 3, L33 – 58] (e.g., 'Load-balanced Adapters') [col 3, L65 – col 4, 15].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Hamilton, for the motivation of providing both a system and method to

automate the control and movement of resources in a dynamic logical partitioning environment [col 1, L67 – col 2, L2].

As per claim 2, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 3, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 4, Starkovich discloses the method of claim 1, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claim 5, Starkovich discloses the method of claim 1, wherein the adapters convert protocol specific messages into commonly formatted messages (e.g., the 'response' is converted by the adapter to an HTML or XML message to transfer back to the requester…) [Abstract] [col 3,L55-57].

As per claim 6, Starkovich discloses the method of claim 1, further including processing common functions associated with the information before transferring the information to the adapters (e.g., the gateway converts the service request to a format acceptable by an Enterprise Server) [Abstract].

As per claim 9, Starkovich discloses the method of claim 1, wherein the adapters communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

2. Claims 7, 10, 12, 14, 16, 18, 22, 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Hamilton and in further view of Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1.

As per claim 7, while the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1, they not explicitly disclose the additionally recited feature of the method wherein the information is associated with an event that originated on a network element. However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract].

Specifically, Levesque discloses the additionally recited feature of the method wherein the information is associated with an event (e.g., TL1 Events) [1025] (e.g., Transient Condition Events) [1222-1223] (e.g., CORBA Event Service) [1538] that originated on a network element (i.e., 'network element') [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Hamilton, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claims 10, 12, 14, 16, 22, 28 and 29, while the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method including transferring information from an operations support system. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method including transferring information from an operations support system (Levesque: e.g, 'Operational Support System') [0172].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Hamilton, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claims 14 and 22 recites the same limitations as claims 10 and 12, but operating in the opposite direction, which is also expressly disclosed by Starkovich (e.g., 'bidirectional' communication between the network element / client, adapter(s), gateway(s) and application server) [Figs. 1-3].

As per claim 18, while the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the information communicated to the adapter is associated with an event that originated on a network element. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the information communicated to the adapter is associated with an event (e.g., TL1 Events) [1025] (e.g., Transient Condition Events) [1222-1223] (e.g., CORBA Event Service) [1538] that originated on a network element (i.e., 'network element') [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to the combination of Starkovich and Hamilton, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over over Starkovich in view of Hamilton and in further view of Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 8, while the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Hamilton, with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [0001-002].

4. Claims 11, 13, 15, and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Hamilton and in further view of Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 11, 13 and 15, while the combination of Starkovich and Hamilton discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method transferring information to a selected application server based on a load balancing scheme. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including transferring information to a selected application server based on a load balancing scheme (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing').

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich and Hamilton, with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

Claim 13 recites the same limitations as claim 11, but operates in the opposite direction, which is also expressly disclosed by Starkovich (e.g., 'bidirectional' communication between the network element / client, adapter(s), gateway(s) and application server) [Figs. 1-3]. Claims 30 and 31 recite similar limitations as 11, and are accordingly rejected on the same basis.

5. Claim 17, 19-21, 23-27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Hamilton and in further view of Levesque and Scheifer.

As per claims 17 and 24, while the combination of Starkovich, Hamilton and Levesque discloses substantial features of the invention as in claim 10 or 12, none explicitly discloses the additionally recited feature of the method wherein the application server is a server instance in the J2EE application server architecture. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method wherein the application server is a server instance in the J2EE application server architecture (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing').

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich, Hamilton and Levesque, with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

As per claims 19-21 and 32, while the combination of Starkovich, Hamilton and Levesque discloses substantial features of the invention as in claim 17, they do not explicitly disclose the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements (Levesque: e.g, a 'network element management system' wherein network elements can be 'grouped', viewed and manipulated according to groups) [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich, Hamilton and Levesque, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claim 32 recites similar limitations as claims 11 and 19 combined, and is accordingly rejected on the same basis.

As per claim 23, Starkovich discloses the method of claim 17, wherein the application server is preselected to handle events from the network element [Figs. 1-5].

As per claim 25, while the combination of Starkovich, Hamilton and Levesque discloses substantial features of the invention as in claim 1, they do not explicitly disclose the additionally recited feature of the method wherein the event is a trap or performance management data. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the event is a trap or performance management data (Levesque: e.g., trap notification / performance data) [1541].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Starkovich, Hamilton and Levesque, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 26, Starkovich discloses the method of claim 17, wherein the adapter is on a separate physical machine from the application server [Figs. 1-5].

As per claim 27, Starkovich discloses the method of claim 17, wherein the information is transferred to a plurality of application servers (e.g., DCOM Server 364, CORBA Server 354) [Fig. 4].

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP 706.06(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/John Follansbee/
Supervisory Patent Examiner, Art Unit 2451

Glenford Madamba
Examiner
Art Unit 2451

Notice of References Cited	Application/Control No. 10/742,573	Applicant(s)/Patent Under Reexamination ZHOU ET AL.	
	Examiner Glenford Madamba	Art Unit 2451	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,325,062	01-2008	Hamilton et al.	709/226
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009	02/26/2010							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	✓							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
	9	✓	✓							
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	27	✓	✓							
	28	✓	✓							
	29	✓	✓							
	30	✓	✓							
	31	✓	✓							
	32	✓	✓							

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

SEARCHED

Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/
Claim amendments and associated remarks received in response to CTNF. New grounds of rejection provided for the amended claim set and Final OAction sent out as response.	02/26/2010	/GJM/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:24
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57

S8	2	S4 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:02
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16

S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:00
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01

S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:06
S26	106	jvm same (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13

S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$). did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28

S42	17	gateway and load $1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:37
S43	48	load$1balanc$3 with (adapter$1, adaptor $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41
S44	31	S43 not S42	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/02/26 14:41

EAST Search History (Interference)

< This search history is empty>

2/26/2010 6:19:37 PM
C:\Documents and Settings\gmadamba\My Documents\EAST\Workspaces\10742573_2009-03-24.wsp

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Zhou, et al.
Serial No.: 10/742,573
Filed: December 19, 2003
Title: **NETWORK MANAGEMENT SYSTEM**
Group Art Unit: 2451
Examiner: Madamba

CERTIFICATE OF FACSIMILE TRANSMISSION

The undersigned hereby certifies that this document is being facsimile transmitted to the fax number and date given below.

Facsimile Number: 571-273-8300
No. of Pages: 1 cov + 1 cc + 11 Resp + 1 Ext = 14

Date Transmitted: October 16, 2009

By: Greg H Leitich

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Arlington, VA 22313-1450

Dear Sir:

In response to the Official Action mailed April 16, 2009, please enter the following Amendment:

Amendments to the claims begin on page 2.

Remarks begin on page 8.

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IN THE CLAIMS:

This listing of the claims will replace all prior versions and listings of the claims in the application:

1. (Currently Amended) A method of communicating in a network management system, including:

transferring information from an application server in a server cluster to a gateway that processes the information;

transferring the gateway processed information from the gateway to a plurality of adapters according to a load balancing scheme associated with the gateway that process the gateway processed information; and

transferring the adapter processed information from one of the adapters to a client.

2. (Previously Presented) The method of claim 1, wherein the gateway is one of a plurality of gateways.

3. (Previously Presented) The method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways.

4. (Previously Presented) The method of claim 1, wherein the gateway is a physically and logically separate machine from the application server.

5. (Previously Presented) The method of claim 1, wherein the adapters convert protocol specific messages into commonly formatted messages.

6. (Previously Presented) The method of claim 1, further including processing common functions associated with the information before transferring the

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information to the adapters.

7. (Previously Presented) The method of claim 1, wherein the information is associated with an event that originated on a network element.

8. (Previously Presented) The method of claim 1, wherein the adapters are software modules that run on Java virtual machines.

9. (Previously Presented) The method of claim 1, wherein the adapters communicate with the application server over an RMI interface.

10. (Currently Amended) A method of communicating in a network management system, including:

transferring information from an operations support system to a plurality of adapters associated with a gateway;

transferring the information from the adapters to the gateway; and

transferring the information from the gateway to an application server in a server cluster according to a load balancing scheme.

11. (Currently Amended) A method of communicating in a network management system, including:

transferring information to a selected application server in a system including a plurality of application servers based on a load balancing scheme; and

transferring the information from the selected server to a network element via an adapter.

12. (Previously Presented) The method of claim 10, wherein information is transferred from a gateway, operation support system, or GUI to a selected application

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server.

13. (Currently Amended) A method of communicating in a network management system, including:

transferring information from a network element to an adapter;

transferring the information from the adapter to a selected application server in a system including a plurality of application servers based on a load balancing scheme.

14. (Previously Presented) The method of claim 12, further including:

transferring the information from the selected server to a gateway, operation support system, or GUI.

15. (Previously Presented) The method of claim 10 or 12, wherein the load balancing scheme is based on selecting the server with the lightest load.

16. (Previously Presented) The method of claim 10 or 12, wherein the application server is one of a plurality of application servers selected.

17. (Previously Presented) The method of claim 10 or 12, wherein the application server is a server instance in the J2EE application server architecture.

18. (Currently Amended) A method of communicating in a network management system, including:

communicating an event from a network element to a configured adapter wherein the configured adapter is preselected to handle events from the network element; and

transferring information associated with the event from the configured adapter to an application server in a server cluster according to a load-balancing scheme.

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19. (Previously Presented) The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements.

20. (Previously Presented) The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from different groups of network elements.

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21. (Previously Presented) The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein one or more adapters is preselected to handle events from a group of network elements.

22. (Previously Presented) The method of claim 17, further including transferring information associated with the event from the application server to a gateway, OSS, or GUI.

23. (Previously Presented) The method of claim 17, wherein the application server is preselected to handle events from the network element.

24. (Previously Presented) The method of claim 17, wherein the application server is selected based on a load balancing scheme.

25. (Previously Presented) The method of claim 17, wherein the event is a trap or performance management data.

26. (Previously Presented) The method of claim 17, wherein the adapter is on a separate physical machine from the application server.

27. (Previously Presented) The method of claim 17, wherein the information is transferred to a plurality of application servers.

28. (Currently Amended) A network management system, including:

a gateway configured to receive information from an application server in a server cluster;

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a plurality of adapters configured to receive the information from the gateway according to a load balancing scheme; and

an OSS configured to receive the information from the adapters;

wherein the adapters are associated with the gateway.

29. (Currently Amended) A network management system, including:

a plurality of adapters configured to receive information from an OSS;

a gateway configured to receive the information from the adapters; and

an application server in a server cluster configured to receive the information from the gateway according to a load-balancing scheme;

wherein the adapters are associated with the gateway.

30. (Currently Amended) A network management system, including:

an application server in a system including a plurality of application servers selected to receive information based on a load balancing scheme; and

a network element configured to receive information from the application server via an adapter.

31. (Currently Amended) A network management system, including:

an application server in a system including a plurality of application servers selected to receive information based on a load balancing scheme; and

a network element capable of receiving information from the application server via an adapter.

32. (Currently Amended) A network management system, including:

an adapter preselected to handle events from a network element; and

an application server in a system including a plurality of application servers configured to receive information associated with the event from the adapter.

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REMARKS

Upon entry of the instant Amendment, Claims 1-32 are pending. Claims 1, 10, 11, 13, 18, and 27-32 have been amended to more particularly point out applicants' invention.

Claims 1-5, 6, and 9 have been rejected under 35 U.S.C. 102(e) as being anticipated by Starkovich et al, U.S. Patent No. 7,111,077 B1 ("Starkovich"). In order for there to be anticipation, each and every element of the claimed invention must be present in a single, prior reference. Applicants respectfully submit that Starkovich does not teach, suggest, or imply the claimed invention.

As discussed in the application, the present invention relates to a robust and scalable network management system. In particular, aspects of the present invention provide for application servers and gateways that are served by load-balancers.

Accordingly, claim 1 has been amended to recite "a server cluster" and "transferring the gateway processed information from the gateway to a plurality of adapters according to a load balancing scheme."

In contrast, Starkovich relates merely to a gateway and does not appear to provide, inter alia, a server cluster or a load-balancing system as recited in the claims at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection.

Claims 7, 10, 12, 14, 16, 18, 22, 28, and 29 have been rejected under 35 U.S.C. 103 as being unpatentable over Starkovich in view of Levesque et al, U.S. Patent Publication No. 2004/0107277 ("Levesque"). Applicants respectfully submit that the present invention is not taught, suggested, or implied by Starkovich or Levesque, either singly or in combination.

Claim 10 has been amended to recite "transferring the information from the gateway to an application server in a server cluster according to a load balancing scheme;" claim 18 has been amended to recite "transferring information associated with the event from the configured adapter to an application server in a server cluster

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according to a load-balancing scheme;" claim 28 has been amended to recite "a plurality of adapters configured to receive the information from the gateway according to a load balancing scheme;" claim 29 has been amended to recite "an application server in a server cluster configured to receive the information from the gateway according to a load-balancing scheme;" and claim 30 has been amended to recite "an application server in a system including a plurality of application servers selected to receive information based on a load balancing scheme."

Starkovich has been discussed above. Levesque is relied on for allegedly teaching information associated with an event that originated on a network element; transferring information from an operations support system; or an adapter associated with an event that originated on a network element. However, like Starkovich, Levesque does not appear to have anything to do with load-balancing in a system including multiple servers, as generally recited in the claims at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection.

Claim 8 has been rejected under 35 U.S.C. 103 as being unpatentable over Starkovich in view of Fenton et al., U.S. Patent Publication No. 2004/0040030 ("Fenton"). Starkovich has been discussed above. Fenton is relied on merely for allegedly teaching software modules that run on Java virtual machines. Assuming this is true, however, like Starkovich, Fenton does not provide for load balancing and multiple servers, as recited in the claim at issue. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection.

Claims 11, 13, 15, and 30-32 have been rejected under 35 U.S.C. 103 as being unpatentable over Starkovich in view of Schiefer et al, U.S. Patent Publication No. 2004/0249644 ("Scheifer"). Applicants respectfully submit that the claimed invention is not taught, suggested, or implied by Starkovich or Schiefer, either singly or in combination.

Claims 11, 13, and 30-32 have been amended to recite "a system including a plurality of application servers." In contrast, as discussed above, Starkovich does not

PAGE 12/14 * RCVD AT 10/16/2009 9:19:35 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/4 * DNIS:2738300 * CSID:512 469 0023 * DURATION (mm-ss):04-26

provide for load-balancing as recited in the claims at issue.

The Patent Offices acknowledges the lack of load-balancing in Starkovich by citing Schiefer for allegedly teaching the recited load balancing. However, while Schiefer states that its JSEE server can perform "load-balancing," Schiefer nowhere indicates that the load-balancing is for or related to transferring data to or from an application server.

Because neither reference provides for transferring data to or from a plurality of servers based upon load balancing, as recited in the claims at issue, the Examiner is respectfully requested to reconsider and withdraw the rejection.

Claims 17, 19-21, and 23-27 have been rejected under 35 U.S.C. 103 as being unpatentable over Starkovich in view of Levesque and further in view of Scheifer.

Starkovich, Levesque, and Schiefer have been discussed above. For similar reasons, applicants respectfully submit that the invention of these dependent claims is not taught, suggested, or implied by Starkovich, Levesque, or Schiefer, either singly or in combination. As such, the Examiner is respectfully requested to reconsider and withdraw the rejection.

PAGE 13/14 * RCVD AT 10/16/2009 9:19:35 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/4 * DNIS:2738300 * CSID:512 469 0023 * DURATION (mm-ss):04-26

Serial No.: 10/742,573 Attorney Docket No.: HAMMP004/7004US

For all of the above reasons, Applicants respectfully submit that the application is in condition for allowance, which allowance is earnestly solicited.

Respectfully requested,

By:

Greg H. Leitich
Registration No.: 39,745
Attorney for Applicant(s)
Tel.: 512-469-0063
Fax: 512-469-0023

Date: 16 Oct. 2009

Greg H. Leitich
P.O. Box 3255
Austin TX 78703

PAGE 14/14 * RCVD AT 10/16/2009 9:19:35 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/4 * DNIS:2738300 * CSID:512 469 0023 * DURATION (mm-ss):04-26

GREG H. LEITICH

P.O. BOX 3255
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FAX TRANSMITTAL COVER SHEET

TO: Examiner Madamba
USPTO 571-273-8300
Group Art Unit 2451

DATE: October 16, 2009

FROM: Greg H. Leitich

MATTER: 10/742,573

TOTAL NUMBER OF PAGES (INCLUDING THIS ONE): 14

Applicants: Zhou, et al.
Serial No.: 10/742,573
Filed: December 19, 2003
Title: **NETWORK MANAGEMENT SYSTEM**
Group Art Unit: 2451
Examiner: Madamba

CERTIFICATE OF FACSIMILE TRANSMISSION

The undersigned hereby certifies that this document is being facsimile transmitted to the fax number and date given below.

Facsimile Number: 571-273-8300
No. of Pages: 1 cov + 1 cc + 11 Resp + 1 Ext = 14

Date Transmitted: October 16, 2009

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Greg H Leitich

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PAGE 1/14 * RCVD AT 10/16/2009 9:19:35 AM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/4 * DNIS:2738300 * CSID:512 469 0023 * DURATION (mm-ss):04-26

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OCT 16 2009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Zhou, et al.
Serial No.: 10/742,573
Filed: December 19, 2003
Title: **NETWORK MANAGEMENT SYSTEM**
Group Art Unit: 2451
Examiner: Madamba

CERTIFICATE OF FACSIMILE TRANSMISSION

The undersigned hereby certifies that this document is being facsimile transmitted to the fax number and date given below.

Facsimile Number: 571-273-8300.
No. of Pages: 1 cov + 1 cc + 11 Resp + 1 Ext = 14

Date Transmitted: October 16, 2009

By: _____
Greg H Leitich

Petition For Extension of Time

Box Amendment FEE
Commissioner of Patents and Trademarks
Washington, DC 20231

Dear Sir:

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a response to the office action in the above identified application.

The requested extension and appropriate small-entity fee are as follows:

___	One month (37 CFR 1.17(a)(1))	$ 65.00
___	Two months (37 CFR 1.17(a)(2))	$ 245.00
X	Three months (37 CFR 1.17(a)(3))	$ 555.00
___	Four months (37 CFR 1.17(a)(4))	$865.00
___	Five months (37 CFR 1.17(a)(5))	$1175.00

___ A check in the amount of the fee is enclosed
X A credit card payment form including the amount of the fee is enclosed
___ The Commissioner has already been authorized to charge fees in this application to a Deposit Account.

I am the:
___ assignee of record of the entire interest.
___ applicant.
___ attorney or agent of record.
X attorney or agent under 37 CFR 1.34(a). Reg. No: 39,745

Date 10/16/2009 Name: Greg H. Leitich Signature: _____

10/16/2009 JVONG1 00000035 10742573
01 FC:2253 555.00 OP

PTO/SB/06 (07-06)
Approved for use through 1/31/2007. OMB 0651-0032
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.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number	Filing Date	☐ To be Mailed
10/742,573	12/19/2003	

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY ☐ RATE ($)	SMALL ENTITY FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =		OR	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =			X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT 10/16/2009	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE ($)	SMALL ENTITY ADDITIONAL FEE ($)	OR	OTHER THAN SMALL ENTITY RATE ($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 34	Minus	** 44	= 0	X $ =		OR	X $52=	0
Independent (37 CFR 1.16(h))	* 9	Minus	***10	= 0	X $ =		OR	X $220=	0
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

AMENDMENT	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)		RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =		OR	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =		OR	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))									
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
/FELICIA FARMER/

This collection of information is required by 37 CFR 1.16. 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 1.14. This collection is estimated to take 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
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SEP 16 2009

OFFICE OF PETITIONS

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

In re Application of :
Eileen Zhou, et. al. :
Application No. 10/742,573 : DECISION ON PETITION
Filed: December 19, 2003 : TO WITHDRAW FROM
Attorney Docket No. HAMMP004 : RECORD

This is a decision on the Request to Withdraw as attorney or agent of record under 37 CFR § 1.36(b), filed July 23, 2009.

The request is **APPROVED.**

A grantable request to withdraw as attorney/agent of record must be signed by every attorney/agent seeking to withdraw or contain a clear indication that one attorney is signing on behalf of another/others.

The request was signed by Lee Van Pelt on behalf of all attorneys/agents of record who are associated with customer No. 21912. Therefore, Lee Van Pelt and all the attorneys/agents of record who are associated with customer No. 21912 have been withdrawn.

Applicant is reminded that there are no attorneys/agents of record at this time.

The request to change the correspondence of record is not acceptable[1] as the requested correspondence address is not that of: (1) the first named signing inventor; or (2) an intervening assignee of the entire interest under 37 C.F.R 3.71. All future communications from the Office will continue to be directed to the above listed address until otherwise properly notified by the applicant.

There is an outstanding Office action mailed April 16, 2009 that requires a reply from applicant.

This application is being referred to Technology Center Art Unit 2451 to await a response to the Office action mailed April 16, 2009.

Telephone inquiries concerning this decision should be directed to the undersigned at (571) 272-3226.

Andrea Smith
Petitions Examiner
Office of Petitions

cc: Greg Leitich
804 Baylor Street
Austin, TX 78703

[1] The Office will no longer change the correspondence address to that of a new practitioner unless the Request is accompanied by a power of attorney to a new practitioner (*See* USPTO Form PTO/SB/82).

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
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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
10/742,573	12/19/2003	Eileen Zhou	HAMMP004

CONFIRMATION NO. 4061

POWER OF ATTORNEY NOTICE

21912
VAN PELT, YI & JAMES LLP
10050 N. FOOTHILL BLVD #200
CUPERTINO, CA 95014

OC000000037819125

Date Mailed: 09/15/2009

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/23/2009.

- The withdrawal as attorney in this application has been accepted. Future correspondence will be mailed to the new address of record. 37 CFR 1.33.

/amsmith/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

OIPE
JUL 23 2009
PATENT & TRADEMARK OFFICE

Doc Code: PET.POA.WDRW
Document Description: Petition to withdraw attorney or agent (SB83)

PTO/SB/83 (04-08)
Approved for use through 12/31/2008. OMB 0651-0035
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.

REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Application Number	10/742,573
Filing Date	December 19, 2003
First Named Inventor	Eileen Zhou
Art Unit	2451
Examiner Name	Glenford J. Madamba
Attorney Docket Number	HAMMP004

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Please withdraw me as attorney or agent for the above identified patent application, and

- ☐ all the practitioners of record;
- ☐ the practitioners (with registration numbers) of record listed on the attached paper(s); or
- ☑ the practitioners of record associated with Customer Number: 21912

NOTE: The immediately preceding box should only be marked when the practitioners were appointed using the listed Customer Number.

The reason(s) for this request are those described in 37 CFR :

☐ 10.40(b)(1)	☐ 10.40(b)(2)	☐ 10.40(b)(3)	☐ 10.40(b)(4)
☐ 10.40(c)(1)(i)	☐ 10.40(c)(1)(ii)	☐ 10.40(c)(1)(iii)	☐ 10.40(c)(1)(iv)
☐ 10.40(c)(1)(v)	☐ 10.40(c)(1)(vi)	☑ 10.40(c)(2)	☐ 10.40(c)(3)
☐ 10.40(c)(4)	☐ 10.40(c)(5)	☐ 10.40(c)(6) Please explain below:	

Certifications

Check each box below that is factually correct. WARNING: If a box is left unchecked, the request will likely not be approved.

1. ☑ I/We have given reasonable notice to the client, prior to the expiration of the response period, that the practitioner(s) intend to withdraw from employment.

2. ☑ I/We have delivered to the client or a duly authorized representative of the client all papers and property (including funds) to which the client is entitled.

3. ☑ I/We have notified the client of any responses that may be due and the time frame within which the client must respond.

Please provide an explanation, if necessary:

This collection of information is required by 37 CFR 1.36. 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 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

OIPE
JUL 23 2009
PATENT & TRADEMARK OFFICE

PTO/SB/83 (04-08)
Approved for use through 12/31/2008. OMB 0651-0035
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.

REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Complete the following section only when the correspondence address will change. *Changes of address will only be accepted to an inventor or an assignee that has properly made itself of record pursuant to 37 CFR 3.71.*

Change the correspondence address and direct all future correspondence to:

A. ☐ The address of the inventor or assignee associated with Customer Number: _____

OR

B. ☑ Inventor or Assignee name	Greg Leitich
Address	804 Baylor Street

City Austin	State TX	Zip 78703	Country US
Telephone		Email leitich@sbcglobal.net	

I am authorized to sign on behalf of myself and all withdrawing practitioners.

Signature			
Name	Lee Van Pelt	Registration No. 38,352	
Address	10050 N. Foothill Blvd., Suite 200		
City Cupertino	State CA	Zip 95014	Country US
Date	July 17 , 2009	Telephone No. 408-973-2585	

NOTE: ***Withdrawal is effective when approved rather than when received.***

This collection of information is required by 37 CFR 1.36. 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 12 minutes 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Address: COMMISSIONER FOR PATENTS
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/742,573	12/19/2003	Eileen Zhou	HAMMP004	4061

21912 7590 04/16/2009

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

EXAMINER	
MADAMBA, GLENFORD J	

ART UNIT	PAPER NUMBER
2451	

MAIL DATE	DELIVERY MODE
04/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/742,573	ZHOU ET AL.	
	Examiner	Art Unit	
	Glenford Madamba	2451	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 6 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Starkovich et al (hereinafter Starkovich), U.S. Patent 7,111,077 B1.

As per claim 1, Starkovich discloses a method of communicating in a network management system, including:

transferring information from an application server (e.g., Server Application 18) [Fig. 1] (e.g., End Service Provider 78) [Fig. 2] to a gateway (e.g., GGATE 72) that processes the information [Figs. 2 & 3];

transferring the gateway processed information from the gateway (e.g., GGATE 72) to a plurality of adapters associated with the gateway that process the gateway processed information (e.g., Adapter 0, Adapter 1, …Adapter m) [Fig. 3.]; and transferring the adapter processed information from one of the adapters to a client (e.g.,

Client 0, Client 1, …Client m) [Figs. 2 & 3] [Fig. 8].

As per claim 2, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 3, Starkovich discloses the method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways. (e.g., GGATE, JGATE, TUXGATE, VIEWGATE, etc.) [Fig. 5]

As per claim 4, Starkovich discloses the method of claim 1, wherein the gateway (e.g., GGATE 72) is a physically and logically separate machine from the application server (e.g., End Service Provider 78). [Fig. 2] (e.g., Node 2200 with APS 208) [Figs. 4 & 5] (e.g., Web Sever 235, DCOM Server 358, or CORBA Server 360) [Figs. 4 & 5]

As per claim 5, Starkovich discloses the method of claim 1, wherein the adapters convert protocol specific messages into commonly formatted messages (e.g., the 'response' is converted by the adapter to an HTML or XML message to transfer back to the requester…) [Abstract] [col 3,L55-57].

As per claim 6, Starkovich discloses the method of claim 1, further including processing common functions associated with the information before transferring the information to the adapters (e.g., the gateway converts the service request to a format acceptable by

an Enterprise Server) [Abstract].

As per claim 9, Starkovich discloses the method of claim 1, wherein the adapters communicate with the application server over an RMI interface. (e.g., Java Remote Method Invocation) [col 4, L34-49].

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 7, 10, 12, 14, 16, 18, 22, 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Levesque et al (hereinafter Levesque), U.S. Patent Publication US 2004/0107277 A1.

As per claim 7, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method wherein the information is associated with an event that originated on a network element. However, this feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the information is associated with an event (e.g., TL1 Events) [1025] (e.g., Transient Condition Events) [1222-1223] (e.g., CORBA Event Service) [1538] that originated on a network element (i.e., 'network element') [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claims 10, 12, 14, 16, 22, 28 and 29, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method including transferring information from an operations support system. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method including

transferring information from an operations support system (Levesque: e.g, 'Operational Support System') [0172].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

Claims 14 and 22 recites the same limitations as claims 10 and 12, but operating in the opposite direction, which is also expressly disclosed by Starkovich (e.g., 'bidirectional' communication between the network element / client, adapter(s), gateway(s) and application server) [Figs. 1-3].

As per claim 18, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method wherein the information communicated to the adapter is associated with an event that originated on a network element. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein the information communicated to the adapter is associated with an event (e.g., TL1

Events) [1025] (e.g., Transient Condition Events) [1222-1223] (e.g., CORBA Event Service) [1538] that originated on a network element (i.e., 'network element') [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Fenton et al (hereinafter Fenton), U.S. Patent Publication US 2004/0040030 A1.

As per claim 8, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines. However, the feature is taught by Fenton in a related endeavor.

Fenton discloses as his invention a method for integrating a resource in a network including receiving at a first adapter a command associated with a function to be performed by a resource [Abstract]. Specifically, Fenton discloses the additionally recited feature of the method wherein the adapters are software modules that run on Java virtual machines (e.g., adapter modules 124 /126 run under one or more JVMs) [0025].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Fenton, for the motivation of providing a method and system for integrating resources in a network which also resolves the time-consuming task of software development of integration adapters [0001-002].

4. Claims 11, 13, 15, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Scheifer et al (hereinafter Scheifer), U.S. Patent Publication US 2004/0249644 A1.

As per claims 11, 13 and 15, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method transferring information to a selected application server based on a load balancing scheme. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method including transferring information to a selected application server based on a load balancing scheme (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing').

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

Claim 13 recites the same limitations as claim11, but operates in the opposite direction, which is also expressly disclosed by Starkovich (e.g., 'bidirectional' communication between the network element / client, adapter(s), gateway(s) and application server) [Figs. 1-3]

5. Claim 17, 19-21 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Starkovich in view of Levesque and in further view of Scheifer.

As per claims 17 and 24, while the combination of Starkovich and Levesque discloses substantial features of the invention as in claim 10 or 12, neither explicitly discloses the additionally recited feature of the method wherein the application server is a server instance in the J2EE application server architecture. However, the feature is taught by Scheifer in a related endeavor.

Scheifer discloses as his invention a method to automate business decisions by computer, including capturing an 'event' predetermined to be relevant to a defined set of business decisions by computer [Abstract]. Specifically, Scheifer discloses the additionally recited feature of the method wherein the application server is a server instance in the J2EE application server architecture (Scheifer: operating according to a J2EE architecture / platform with 'load-balancing').

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Scheifer, for the motivation of providing a method in which a decision-making data warehouse system operates in near real-time, thereby minimizing latency time between capture of an event, evaluation of the event, and providing appropriate response based on the evaluation [0001-002].

As per claims 19-21, while Starkovich discloses substantial features of the invention as in claim 17, he does not explicitly disclose the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract].

Specifically, Levesque discloses the additionally recited feature of the method wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements (Levesque: e.g, a 'network element management system' wherein network elements can be 'grouped', viewed and manipulated according to groups) [Abstract].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 23, Starkovich discloses the method of claim 17, wherein the application server is preselected to handle events from the network element [Figs. 1-5].

As per claim 25, while Starkovich discloses substantial features of the invention as in claim 1, he does not explicitly disclose the additionally recited feature of the method wherein the event is a trap or performance management data. However, the feature is taught by Levesque in a related endeavor.

Levesque discloses as his invention a network management system in which network elements can be grouped, viewed, and manipulated by groups [Abstract]. Specifically, Levesque discloses the additionally recited feature of the method wherein

the event is a trap or performance management data (Levesque: e.g., trap notification / performance data) [1541].

It would thus be obvious to one of ordinary skill in the art at the time of the invention to combine/modify Starkovich's invention, with the above said feature, as disclosed by Levesque, for the motivation of providing both greater ease of use and faster response in element management systems with tree-structured representations [Abstract].

As per claim 26, Starkovich discloses the method of claim 17, wherein the adapter is on a separate physical machine from the application server [Figs. 1-5].

As per claim 27, Starkovich discloses the method of claim 17, wherein the information is transferred to a plurality of application servers (e.g., DCOM Server 364, CORBA Server 354) [Fig. 4].

Conclusion

1. The Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the

references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenford Madamba whose telephone number is 571-272-7989. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenford Madamba
Examiner
Art Unit 2451

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2451

Notice of References Cited	Application/Control No. 10/742,573	Applicant(s)/Patent Under Reexamination ZHOU ET AL.	
	Examiner Glenford Madamba	Art Unit 2451	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,111,077	09-2006	Starkovich et al.	709/246
*	B	US-2004/0107277	06-2004	Levesque et al.	709/223
*	C	US-2004/0249644	12-2004	Schiefer et al.	705/001
*	D	US-2004/0040030	02-2004	Fenton et al.	719/320
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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BIB DATA SHEET

CONFIRMATION NO. 4061

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/742,573	12/19/2003	370	2451	HAMMP004

APPLICANTS

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Roger Liu, San Jose, CA;
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Moshe Itah, Palo Alto, CA;
John Z. Yu, Santa Clara, CA;

**** CONTINUING DATA ***************************

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
03/31/2004

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /GLENFORD J MADAMBA/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	6	32	10

ADDRESS

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CUPERTINO, CA 95014
UNITED STATES

TITLE

Network management system

FILING FEE RECEIVED		
2224	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	04/10/2009								
	1	✓								
	2	✓								
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	30	✓								
	31	✓								
	32	✓								

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10742573	ZHOU ET AL.
	Examiner	Art Unit
	Glenford Madamba	2451

SEARCHED

Class	Subclass	Date	Examiner
709	203, 246	04/10/2009	/GJM/
719	320	04/10/2009	/GJM/

SEARCH NOTES

Search Notes	Date	Examiner
DBs searched: USPAT, USPG-PUB, USOCR, EPO, JPO, DERWENT, IBM-TDB	03/29/2009	/GJM/

INTERFERENCE SEARCH

Class	Subclass	Date	Examiner

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	71	"application server" same gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:19
S2	8	S1 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:20
S3	7	S1 and java near2 "virtual machine"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:23
S4	77	gateway same adapters same java	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:24
S5	44	S4 and application near2 server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S6	5	S5 and RMI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:25
S7	1	S5 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57

S8	2	S4 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:57
S9	3	S1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:58
S10	174	"application server" and gateway$1 and adapter$1 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 10:59
S11	32	S10 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S12	17	S11 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:00
S13	15	S11 not S12	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/23 11:02
S14	1630	nms and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16
S15	111	S14 and gateway and (adaptor$1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:16

S16	57	S15 and application adj server$1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S17	11	S16 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:17
S18	23	S16 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:21
S19	478	"application server" and gateway same adapters	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:22
S20	603	"application server" and gateway same (adaptor$1, adapter $1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S21	1	S15 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 11:23
S22	0	"xml event" adj (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:00
S23	1288	event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01

S24	5	xml near3 event near2 (adapter, adaptor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:01
S25	11	S16 and JVM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:06
S26	106	jvm same (adaptor $1, adapter$1)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S27	0	S26 and nms	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S28	1	S26 and oss	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:07
S29	41	S26 and rmi	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S30	29	S29 and j2ee	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:08
S31	11	S15 and Jvm	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/03/24 12:13

S32	16	(US-20020087945-$ or US-20080214210-$ or US-20050149630-$ or US-20030074485-$ or US-20020107957-$ or US-20070106808-$ or US-20050240621-$ or US-20040107277-$ or US-20040249644-$ or US-20030093575-$ or US-20030093403-$ or US-20040040030-$). did. or (US-7111077-$ or US-7376958-$ or US-6954757-$ or US-6757899-$).did.	US-PGPUB; USPAT	OR	ON	2009/03/24 12:30
S33	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:30
S34	0	S32 and load $1balanc$3	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S35	1	S32 and j2ee	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/03/24 12:31
S36	0	zhou-eileen.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:24
S38	5598	709/203.ccls.	USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2009/04/10 12:26
S39	2295	709/246.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:26
S41	364	719/320.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/10 12:28

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OIPE JC34 JUN 07 2004 PATENT & TRADEMARK OFFICE

DECLARATION AND POWER OF ATTORNEY FOR ORIGINAL U.S. PATENT APPLICATION

Attorney's Docket No. HAMMP004

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: NETWORK MANAGEMENT SYSTEM, the specification of which,

(check one)

1. ☐ is attached hereto.

2. ☒ was filed on December 19, 2003 as U.S. Application No. 10/742,573 and was amended on _____.

3. ☐ was filed on _____ as International PCT Application No. _____ and was amended on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, CFR § 1.56.

I hereby claim foreign priority benefits under Title 35, United States code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Benefits Claimed?
_____ (Appl. No.)	_____ (Country)	_____ (Filing Date)	☐Yes ☐No
_____ (Appl. No.)	_____ (Country)	_____ (Filing Date)	☐Yes ☐No

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

Prior Provisional Application(s)

_____ (Application No.)	_____ (Filing Date)
_____ (Application No.)	_____ (Filing Date)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Prior U.S. Application(s)

(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)
(Application No.)	(Filing Date)	(Status - patented, pending, abandoned)

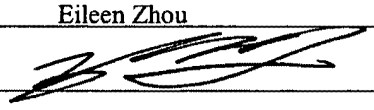
And I hereby appoint the law firm of Van Pelt & Yi LLP, including **Lee Van Pelt (Reg. No. 38,352); Susan C. Yi (Reg. No. 39,883); and William J. James (Reg. No. 40,661) Scott S. Kokka (Reg. No. 51,893) Diana Y. Fu (Reg. No. 52,924) and Clover Huang (Reg. No. P55,285)** as my principal attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Please Direct all Correspondence To: **Customer No. 21912**
Van Pelt & Yi LLP
10050 N. Foothill Blvd., Ste 200.
Cupertino, CA 95014

Direct Telephone Calls To: **Lee Van Pelt at telephone number (408) 973-2590**

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

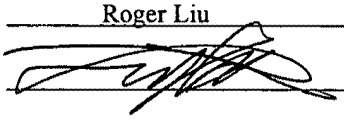
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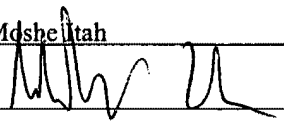
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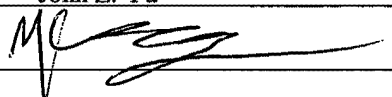
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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/742,573	12/19/2003	Eileen Zhou	HAMMP004

CONFIRMATION NO. 4061

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FORMALITIES LETTER

OC0000000012249743

Date Mailed: 04/01/2004

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
  Applicant must submit $ **770** *to complete the basic filing fee for a non-small entity. If appropriate, applicant may make a written assertion of entitlement to small entity status and pay the small entity filing fee (37 CFR 1.27).*
- The oath or declaration is missing.
  A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of $130 for a non-small entity, must be submitted with the missing items identified in this letter.

The applicant needs to satisfy supplemental fees problems indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Additional claim fees of **$1324** as a non-small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is **$2224** for a Large Entity

- **$770** Statutory basic filing fee.
- **$130** Late oath or declaration Surcharge.

- Total additional claim fee(s) for this application is **$1324**
  - **$602** for **7** independent claims over 3.
  - **$432** for **24** total claims over 20.
  - **$290** for multiple dependent claim surcharge.

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14023 U.S. PTO
121903

UTILITY PATENT APPLICATION TRANSMITTAL (New Nonprovisional Applications Under 37 CFR § 1.53(b))	Attorney Docket No. HAMMP004

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith is the patent application of ( ) application identifier or (X) first named inventor, Eileen Zhou, entitled NETWORK MANAGEMENT SYSTEM, for a(n):

(X) Original Patent Application.

( ) Continuing Application (prior application not abandoned):
( ) Continuation ( ) Divisional ( ) Continuation-in-part (CIP)
of prior Application No. _____, filed _____.

22581 U.S. PTO
10/742573
121903

( ) Please add after the title of the application "This is a
( ) Continuation ( ) Divisional ( ) Continuation-in-part (CIP)
of Application No. _____, filed _____, which is hereby incorporated by reference."

( ) This application claims the benefit of U.S. Provisional Application No. _____ filed_____

Enclosed are:
(X) Specification; 28 Total Pages. (X) Drawing(s); 6 Total Sheets.
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( ) A Newly Executed Combined Declaration and Power of Attorney:
( ) Signed. ( ) Unsigned. ( ) Partially Signed.
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Respectfully submitted,

By: _____
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In re the application of:	Attorney Docket No. HAMMP004
ZHOU, et al	Examiner: Unassigned
Application No: Unassigned	Art Unit: Unassigned
Filed: Herewith	Date: December 19, 2003
Title: NETWORK MANAGEMENT SYSTEM	

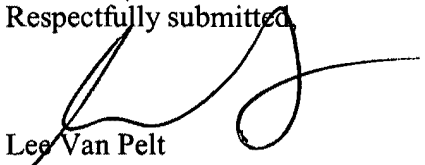
REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

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Respectfully submitted,



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Attorney Docket No.: HAMMP004

Attorney Docket No. HAMMP004

APPLICATION FOR UNITED STATES PATENT

NETWORK MANAGEMENT SYSTEM

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NETWORK MANAGEMENT SYSTEM

FIELD OF THE INVENTION

The present invention relates generally to communications networks. More specifically, a network management system is disclosed.

BACKGROUND OF THE INVENTION

Network management systems (NMS) facilitate the exchange of management information between Network Elements (NEs) and network administrators' Operations Support Systems (OSS). Network administrators can use an NMS to install and configure NEs, provision services, manage network performance, find and solve network problems, and plan for network growth. Network management systems today face many challenges as networks grow in size. Network management systems need to be scalable. For example, thousands of events can be generated when a fault is discovered at a network element. In a large network, a network management system can easily be overwhelmed. It would be desirable to develop a network management system that is robust, scalable, and capable of efficiently handling a growing network.

BRIEF DESCRIPTION OF THE DRAWINGS

Various embodiments of the invention are disclosed in the following detailed description and the accompanying drawings.

Figure 1 is an overall view of a carrier's OSS 108, an NMS 102, and a network 100 including NEs 134 and 142.

Figure 2 is a functional block diagram illustrating a network management system 202 in a network 200.

Figure 3A is a diagram illustrating NMS 300 using application server cluster and load balancing between NB gateway (adapters) and NMS server instances, and between SB adapters and NMS server instances.

Figure 3B is a flowchart illustrating a downlink information flow in which OSS 308 or NMS GUI 312 is the originator of the information while NE 334 or application server (362, or 363, or 364) is the recipient of the information.

Figure 3C is a flowchart illustrating an information flow in which NE 334 is the originator of the information while OSS 308 or NMS GUI 312 is the recipient of the information.

Figure 3D is a flowchart illustrating a technique for transferring information (e.g., traps) from an NE in a partitioned network to server cluster 332.

DETAILED DESCRIPTION

The invention can be implemented in numerous ways, including as a process, an apparatus, a system, a composition of matter, a computer readable medium such as a computer readable storage medium or a computer network wherein program instructions are sent over optical or electronic communication links. In this specification, these implementations, or any other form that the invention may take, may be referred to as techniques. In general, the order of the steps of disclosed processes may be altered within the scope of the invention.

A detailed description of one or more embodiments of the invention is provided below along with accompanying figures that illustrate the principles of the invention. The invention is described in connection with such embodiments, but the invention is not limited to any embodiment. The scope of the invention is limited only by the claims and the invention encompasses numerous alternatives, modifications and equivalents. Numerous specific details are set forth in the following description in order to provide a thorough understanding of the invention. These details are provided for the purpose of example and invention may be practiced according to the claims without some or all of these specific details. For the purpose of clarity, technical material that is known in the technical fields related to the invention has not been described in detail so that the invention is not unnecessarily obscured.

A scalable network management system (NMS) is disclosed. In some embodiments, the NMS includes a so-called northbound (NB) gateway, which includes

various NB adapters, to facilitate transferring and translating information between the NMS server, or servers in a server cluster and an OSS from the network administrator, or carrier. The NB gateway design may be distributed so that multiple NB gateways, each of which includes a certain number of NB adapters, can be logically or physically distributed over different workstations. Information transferred from the gateway to the server cluster can be distributed among servers within the server cluster based on a load balancing scheme, to best utilize the NMS server's processing power. In the direction from NE to NMS (uplink), the managed network can be partitioned by configuring for each Network Element (NE) a so-called southbound (SB) adapter to handle information (or events) originating from that NE. SB adapters may be distributed so that SB adapters can be logically or physically distributed over different workstations. A load balancing scheme may be used to associate a SB adapter to a particular server or servers for processing power efficiency. In the direction from NMS to NE, the load balancing scheme may be used to distribute information from the NMS to a selected SB adapter to reach the destined NE.

Figure 1 is an overall view of a carrier's OSS 108, an NMS 102, and a network 100 including NEs 134 and 142. An NMS refers to a system responsible for managing a network, and facilitates the communication between a carrier's OSS and NEs in the network. In the embodiment illustrated, incumbent element management system (EMS) 138, and incumbent NEs 142 refer to the existing management system and NEs, while NEs 134 refer to the newly introduced NEs for existing network growth. NMS 102 may be used to manage the existing NEs (via existing EMS 138) and newly introduced NEs. A

carrier may operate an OSS over the NMS to manage the entire network to provide services through the growing network. An NE, as used herein, includes any device or node on the network, such as a network switch. GUI 112 and NB gateway 104 are connected to NMS server 132 as clients. NB gateway 104 can be physically and logically separated from the NMS server. The NMS server may include a service cluster which includes multiple service instances. NB gateway 104 includes multiple NB adapters to process information to facilitate communications between NMS and OSS using different types of protocols. More specifically, NB gateway may include Simple Network Management Protocol (SNMP) NB adapter 116, Common Object Request Broker Architecture (CORBA) NB adapter 117, Extensible Markup Language (XML) NB adapter 118, and Transaction Language 1 (TL1) NB adapter 119.

NB devices, such as northbound adapters, include client side devices or network elements or devices that process information between an OSS and an NMS server. SB devices, such as SB adapter and API 120, process information to facilitate communication between the NMS server and NEs, or between the NMS server and incumbent EMS 138. Northbound information includes information that travels in the direction from a network element to an OSS. Southbound information includes information that travels in the direction from an OSS to a network element.

NMS server 132 is connected to an MIB (Management Information Base) running on NEs 134 via SB SNMP/MIB adapter 120. NMS server 132 is also connected to a MIB associated with incumbent EMS 138 via SB SNMP/MIB adapter 120. NMS server 132 is

also connected to an application program interface (API) associated with incumbent EMS 138 via API adapter 120. Incumbent EMS 138 is connected to incumbent NEs 142.

NMS 102 is shown to manage both NEs 134 and incumbent NEs 142. NMS 102 can manage incumbent NEs 142 by communicating with incumbent EMS 138. In general, NMS 102 can assume management of any incumbent network by connecting to an EMS associated with the incumbent network.

NMS server 132 communicates with adapters 116-119 via NB gateway 104. Adapters 116-119 are software modules on NB gateway 104. Accordingly, processing of common functions between adapters 116-119 can be shared. For example, an event sent from an NE to more than one NB adapter can be sent as one event to the NB gateway. Gateway 104 then processes the event and distributes the information appropriately to each NB adapter.

NMS 102 communicates in various protocols in different embodiments. For example:

- The SNMP protocol is used on its downlink (southbound) to communicate with switches or NEs. Command line interface (CLI) access to NEs through Telnet is also provided through the NMS in a cut-through mode;

- The SNMP protocol or a proprietary API is used on its downlink (southbound) to communicate with existing EMS managing incumbent NEs in installed networks;

- XML, CORBA, TL1, and SNMP protocols are used on its uplink (northbound) to communicate with external carriers' OSS's and NMS's.

In some embodiments, most of the time OSS 108 accesses NMS 102 for information and operation support. At other times, OSS 108 directly accesses NEs 134 or NEs 142 using the SNMP protocol. In some embodiments, hundreds or thousands of NEs are managed by an NMS. At the same time, an NE can be managed by multiple NMS's.

Figure 2 is a functional block diagram illustrating a network management system 202 in a network 200. Network 200 includes OSS 208, NMS 202 and NEs 234. NMS 202 includes NB gateway 204, GUI 212, application server 232, NMS database 254, SB adapters 240, file transfer protocol (FTP) server 246, and adapter 250 to communicate with external (incumbent) EMS's. NB gateway 204 includes SNMP adapter 216, CORBA adapter 217, XML adapter 218, and TL1 adapter 219.

OSS 208 is connected to adapters 216-219. GUI 212, NB gateway 204, and database 254 are connected to application server 232. NB gateway 204, application server 232, GUI 212, database 254, SB adapters 240, FTP server 246, and adapter 250 can be configured as physically or logically separate elements. For example, SB adapters 240, FTP server 246, or adapter 250 may be included on the same physical machine as server 232. Application server 232 is connected to NEs 234 via SB adapters 240. Application server 232 is also connected to adapter 250 and FTP server 246, which is connected to NEs 234. Application server 232 may include multiple independent application servers to form a server cluster. A load balancing scheme may be designed to associate NB adapters

with application servers, and to associate SB adapters with application servers, an embodiment discussed further in conjunction with Figure 3.

NB gateway 204 relays management information and operations between server 232 and an external OSS 208. Information includes data, messages, events, or other information that can be communicated in NMS 202. For example, NB gateway 204 can provide network topology and configuration retrieval and provisioning services, and facilitate the integration with OSS 208 for fault management and flow through provisioning. External OSS 208 can communicate with NB gateway 204 via the SNMP, TL1, CORBA or XML protocol as NB interfaces. In some embodiments, NB gateway 204 includes a protocol adapter for each type of protocol, to convert messages of a specific protocol into a common message type, and vice versa. The common message type may be a proprietary message type. NB gateway 204 can communicate with server 232 through RMI interfaces. With NB gateway 232, many functions, such as trap detector/listener, can be efficiently designed to support all NB interfaces with various protocols.

Information is transferred from application server 232 to NB gateway 204 which processes and distributes the information appropriately to adapters 216-219. Processes common to adapters 216-219 can be performed prior to transferring the information to adapters 216-219. NB gateway 204 may include multiple NB gateways, each of which includes a set of NB adapters. The information is then transferred from adapters 216-219 to OSS 208 (292).

Adapters include software modules which can be standalone Java services that run on separate Java Virtual Machines (JVM). The modules can connect to an external system using various protocols and connect back to NMS server 232 via an RMI interface. NMS 202 is shown to include SNMP, CORBA, XML, and TL1 NB adapters. NMS 202 can include any number of NB adapters each associated with any protocol. The following are examples of NB adapter communication within network 200.

SNMP NB adapter 216 is the SNMP interface between external OSS 208 and NMS 202. NMS 202 acts as an SNMP agent. In some embodiments, OSS 208 sends SNMP Set, Get, and GetBulk commands to SNMP NB adapter 216. SNMP NB adapter 216 translates the messages into native Java messages and sends them to application server 232. Application server 232 executes the commands and returns the responses to SNMP NB adapter 216. SNMP NB adapter 216 then converts the responses into SNMP messages and sends the messages back to external OSS 208.

An OSS that wishes to receive traps from NMS 202 can register itself through SNMP NB adapter 216 via the SNMP Set command. SNMP NB adapter 216 will then forward trap messages from application server 232 to the registered OSS. SNMP NB adapter 216 can also translate traps from SNMP v1 format to SNMP v2 format, and vice versa.

XML NB adapter 218 communicates with an external system using XML data. XML NB adapter 218 converts an XML message to a native Java message, and vice

versa. In some embodiments, XML NB adapter 218 includes two adapters: XML command adapter and XML event adapter.

The XML command adapter receives a command from application server 232 and converts it to XML data. Then it creates a TCP/IP socket connection with the corresponding external system, and sends the XML data to the external system over the output stream of the connection. The XML command adapter then waits for the response on the input stream of the connection. It converts XML data received in response to java.util.Map and returns this map to the invoker of the command.

Application managers that wish to receive events from external systems can register with the XML event adapter. The XML event adapter receives XML messages from external systems over a TCP/IP socket connection and translates the messages into name value maps. The XML event adapter then sends the name value maps to each registered application manager.

TL1 NB adapter 219 communicates with an external system using the TL1 protocol. The TL1 NB adapter converts TL1 commands and autonomous messages to a native Java message, and vice versa.

CORBA NB adapter 217 provides a CORBA interface to external OSS's. CORBA NB adapter 217 receives CORBA requests from external OSS's, translates the requests into a Java native message format and sends the messages to application server 232. Application server 232 performs the requested operations and sends the response

back to CORBA NB adapter 217. CORBA NB adapter 217 then translates the response into CORBA messages and sends them to the invoking external OSS.

Application server 232 includes support for various management services, including the typical carrier-class fault-management, configuration, accounting, performance, and security (FCAPS) functions via Configuration Manager, Fault Manager, Performance Manager, Event Log Manager and Security Manager. For example:

- Configuration Manager: A configuration manager is responsible for providing configuration services, including discovering, configuring, and provisioning managed NEs in the network. It provides support for defining and manipulating configuration of network physical inventory, facilities, and connections. It also supports the diagnostic testing of the network elements.

- Fault Manager: A fault manager is responsible for monitoring fault conditions and notifying the OSS and other management systems. It collects fault notifications from NEs, analyzes the notifications, and communicates the appropriate information to the OSS and other management systems.

- Performance Manager: A performance manager allows users to proactively manage the network's health and performance. At a high level, the Performance Manager can be divided into two functions: collecting performance data from NEs, and presenting performance information to a GUI client or other NB performance monitoring (PM) systems. PM data collectors can collect performance data from NEs using various

collection schemes and protocols, then either store the data in an NMS database or directly pass the data to requesting parties, such as a GUI client or an NB third party PM system.

- Event Log Manager: An event log manager collects and records various events from the network. Some examples of an event include an SNMP trap from an NE, periodic performance monitoring (PM) data from an NE, an alarm from an NE or other network device, a security audit log from a server, an SNMP command sent from the NMS to an NE, and the NMS shutting down. The event log manager is both an event recorder and an event publisher.

- Security Manager: A security manager is a service manager that maintains information about users and their access rights to operations and system resources. It is also responsible for security auditing.

- Storage Manager: A storage manager is responsible for managing NMS storage database tables and alarms/events files.

In some embodiments, NMS 202 follows a typical Java 2 Platform Enterprise Edition (J2EE)-based three-tier distributed model: a Java GUI front end tier, a J2EE Application Server tier, and a database tier which can be any Java Database Connectivity (JDBC) compliant database. Other distribution models and protocols are used in various other embodiments. Specifically, the server tier may include a set of backend server modules running in a J2EE Application Server environment, which provide the actual execution of the management functionality. In this embodiment, a complete server

configuration includes a J2EE application server 232 with all the Enterprise Java Beans (EJB) running on it, a set of SB protocol adapters 240, an integrated FTP server 246, and a data services layer 258 which provides caching, metadata repository, and data persistency services.

All NMS management services, such as configuration management, fault management, performance management, security management, event management, and other operation support functionality, may be implemented as EJB or as remote method invocation (RMI) Objects working in conjunction with EJBs. The adapters can run on a separate JVM and communicate back to the EJBs or RMI servers via RMI interfaces. The application server can communicate with external systems using various protocols, including SNMP, CORBA, XML, TL1, and other proprietary interfaces. The FTP server can facilitate large data transfers between the NMS and other external systems.

NMS applications can be implemented as J2EE applications. Bean managed data persistency can be used to overcome the limitation of the default J2EE container managed persistency design, which might be more suitable for e-commerce applications than for OSS/NMS types of application.

NMS 202 is shown to include SNMP and XML SB adapters. NMS 202 can include any number of southbound adapters each associated with any protocol. The following are examples of SB adapters used for communicating with the network 234.

SNMP SB adapter 242 supports communication between application server 232 and SNMP agents running on NEs in network 234. For example, a trap may be sent from

an NE to application server 232. In some embodiments, communication between SNMP SB adapter 242 and application server 232 is implemented using Java RMI. SNMP SB adapter 242 actually can include two adapters: SNMP command adapter and SNMP trap adapter. SNMP command adapter is an adapter that communicates using SNMP. It can be used to send SNMP commands such as SNMP Get, Set, GetNext, GetBulk from application server 232 to the agent running on each NE and return responses to application server 232. The SNMP trap adapter receives traps from SNMP agents, converts them into native Java messages and sends the messages to application server 232. The SNMP trap adapter may also be responsible for synchronizing the traps between NMS 202 and all the managed NEs. The trap synchronization process can either be initiated by the configuration manager or by the trap adapter itself. In some embodiments, each trap from a node contains a trap sequence number. The trap adapter uses this sequence number to ensure that it receives all the traps from all the managed NEs. If the trap adapter detects that traps are missing from a node, it may perform appropriate trap synchronization operations depending on the amount of missing traps.

In some embodiments, if a few traps are missed, the trap adapter requests the node to replay the missing traps. If a large number of traps are missed, it requests the node to save the missing traps into an event log file and ftp the file over. If too many traps are detected missing and it is infeasible to retrieve all the missing traps, the trap adapter gives up retrieving missing traps, and asks the node to save currently active alarms into an active alarm log file and FTP the file over. In the meantime, the trap adapter will notify the configuration manager to start the configuration check process.

In some embodiments, the trap adapter parses and processes active alarm log files and event log files from NEs in network 234. The active alarm log files and event log files contain the protocol description units (PDU) of the traps from the NE. The SNMP trap adapter extracts each PDU, converts it into a name value map, and then sends the name value map to all the registered application managers.

XML SB adapter 243 communicates with NEs in network 234 using XML data. XML SB adapter 243 converts an XML message to a native Java message, and vice versa.

NMS 202 may also include SB adapter 250 to communicate with another vendor's EMS through standard SNMP or any mutually agreed proprietary API. For example, a mutually agreed proprietary API may be based on proprietary information the other vendor uses for service provisioning, such as proprietary MIB tables or proprietary API functional calls. Accordingly, a carrier can perform end-to-end service provisioning across different vendors' NEs for network expansion. A new vendor's NEs can be inserted to a carrier's installed network with minimal interruption for end-to-end service deployment.

In some embodiments, NMS 202 includes an internal FTP server 246. FTP server 246 provides file transfer functionality between NMS 202 and external systems. In one embodiment, application managers or adapters that expect to transfer files to or from an external system register with FTP server 246 and provide FTP server 246 with a callback interface. Upon successful registration, FTP server 246 returns a unique, one-time-use

username and password to the requester. The requester then sends the username and password to the external system. The external system can then use the received username and password to connect to FTP server 246 and start a file transfer. After the file transfer is completed, FTP server 246 invokes a corresponding callback function.

Figure 3A is a diagram illustrating NMS 300 using application server cluster and load balancing between NB gateway (adapters) and NMS server instances, and between SB adapters and NMS server instances. NMS 300 includes NB gateway 304, GUI 312, server cluster 332, database 354, SB adapters 340 and 344, load balancer 358 (with shared bus 370) between NB gateway and NMS server cluster, and load balancer 374 (with shared bus 372) between SB adapters and NMS server cluster. The carrier's OSS may be connected to NB adapters via NB gateway 304. NB gateway 304 includes SNMP adapter 316, CORBA adapter 317, XML adapter 318, and TL1 adapter 319. NMS 300 communicates with NEs 334 via SB adapters 340 and 344.

GUI 312, NB gateway 304, and database 254 are connected to server cluster 332 via bus 370 controlled by the load balancer 358. Server cluster 332 is connected to SB adapters 340 and 344 via bus 372 controlled by the load balancer 374.

Service cluster 332 and load balancers 358 and 374 are introduced for managing large or expanding networks. Server cluster 332 includes NMS servers 362-364. Server cluster 332 may include any number of servers, or server modules (or instances). NMS 300 is dynamic and scalable as the network grows. High scalability is facilitated by using server clustering and distributed adapter architecture, with the load balancing scheme to

connect the server cluster and NB and SB adapters in northbound and southbound directions respectively. Note that the clustering of server modules and distribution of adapter modules can be completely transparent to the GUI client. A GUI client can still view the whole network topology without knowledge of the existence of multiple servers and adapters.

Servers 362-364 may be separate physical or logical server modules, or a combination of physically or logically separated server modules. In some embodiments, NMS 300 uses J2EE application server architecture in which each server may be an independent server instance in a J2EE application server. Accordingly, multiple instances of such application servers can run simultaneously to distribute a workload and protect each other. Each server instance by itself is a complete functioning NMS server that runs independently, and can be run on separate physical machines. Each server instance can be run on the same physical machine or distributed among several physical machines. These NMS server instances work together, forming the "server cluster".

Specifically, each server instance can be associated with the following software modules: GUI 312 and NB gateway 304 via load balancer 358 in the northbound direction, and SB adapters 340 and 344 via load balancer 374 in southbound direction. In some embodiments, there are multiple NB gateways, each of which includes a set of NB adapters performing a specific set of functions. Additional physically or logically separate NB gateways can be added as the network grows. When a first request comes from a functional entity, such as NB gateway, or GUI, or database, load balancer 358 is consulted to locate a server instance according to an algorithm based on certain criterions

(e.g., selecting the lightest loaded server at that time), and then communication is established between the functional entity and the selected server instance. Similarly, when a first request comes from a service instance going southbound, the load balancer 374 is consulted to locate a SB adapter according to a method based on certain criteria, and then the communication is established between the server instance and the selected SB adapter.

Figure 3B is a flowchart illustrating a downlink information flow in which OSS 308 or NMS GUI 312 is the originator of the information while NE 334 or application server (362, or 363, or 364) is the recipient of the information. When the information is originated from OSS (380), it is transferred via a certain protocol (e.g., SNMP, CORBA, XML, or TL1) to NB gateway 304. The NB gateway processes the information and then transfers it to an associated NB adapter based on the received protocol type (382). Alternatively, the information could be originated from GUI 312 where, for example, a user could enter a command on GUI 312 (381). The arriving information is then transferred to a selected server or servers according to load balancer 358 (384). Load balancer 358 may be a software module physically located on any device in NMS 300. Load balancer 358 may use any load balancing algorithm that is appropriate. For example, load balancer 358 may use a round robin scheme, or distribute the load based on CPU usage on each server or servers. In some embodiments, from then on, all information from NB gateway 304 (or GUI 312) is passed to the selected server for processing (385). Alternatively, the selected server may convert the format of the received information to a new format at particular times. The information is then

transferred from the server to a selected SB adapter according to load balancer 374 (386). Load balancer 374 may use any load balancing algorithm that is appropriate. The information is then transferred from the SB adapter to the destined NE in network 334 (387). The response from the NE or NMS server follows the reverse information flow to the OSS or GUI.

Figure 3C is a flowchart illustrating an information flow in which NE 334 is the originator of the information while OSS 308 or NMS GUI 312 is the recipient of the information. Management information (e.g., traps/alarms) is originated from an NE in network 334 (390). The information is transferred to a pre-configured SB adapter. The arriving information at the SB adapter is then transferred to a selected server or servers according to load balancer 374 (391). Load balancer 374 may be a software module physically located on any device in NMS 300. Load balancer 374 may use any load balancing algorithm that is appropriate. For example, load balancer 374 may use a round robin scheme, or distribute the load based on CPU usage on each server or servers. In some embodiments, from then on, all information from the SB adapter is passed to the selected server for processing (392). Alternatively, the selected server may convert the format of the received information to new format at particular times. Depending on the destination, the information is then transferred from the server to a selected NB gateway (393), or the NMS GUI (394). When the information arrives at the NB gateway, it is transferred to a registered NB adapter based on the NB interface (I/F) protocol for communicating with the OSS (395). The information is then transferred from the NB adapter to the OSS (396).

The NMS architecture presented can provide multiple, significant benefits with the design of NB distributed gateway (NB adapters), distributed SB adapters, NMS application server clusters, and load balancing schemes to inter-connect between NB gateway and application server(s), and between SB adapters and application server(s). Three such examples follow.

First, the NB gateway can serve as a single point for receiving different types of information (e.g., network events such as traps) from NEs or the NMS server for distributing to registered NB adapters, and then to the OSS. A NB gateway-based architecture allows the information common to different NB adapters to be sent to the NB gateway just once, instead of multiple copies, and then the NB gateway multicasts the information to multiple destined NB adapters. With this architecture of an NB gateway decoupled from NMS application servers, multiple NB gateways, each of which includes a certain number of NB adapters, can be designed and distributed on different workstations for scalability and performance optimization. In one embodiment, the NB gateways running on different workstations communicate with each other via RMI transporting over TCP/IP.

Secondly, as a network grows to an increasing large scale, more processing power in the NMS servers may be needed for managing the network. With this server cluster-based NMS architecture, new NMS server instances can be incrementally started and added into server cluster 332 without affecting existing operations. The server cluster can be logically and physically distributed, so servers in a cluster can run on different workstations for increasing processing power. The load balancer allows the management

work load to be distributed among all server instances in any desired fashion, which results in maximal efficiency and flexibility for any management policy to be implemented as carriers wish. An instance of the server can also be shut down for any reason without interrupting the server functionality as a whole. When a server is shutdown, its associated software modules (NB gateway 304, GUI 312, or SB adapters 340 or 344) automatically re-establish the association with another server instance (one of existing servers 362-364 or a standby server) based on certain criterion, such as selecting the lightest loaded server.

Thirdly, the distributed SB adapter-based NMS architecture can support a flexible network partitioning to manage different management domains based on the amount of management traffic in each domain in a large scale network. All NEs in a management domain are associated with a SB adapter to communicate with the NMS servers. That is, the events in each partitioned domain are monitored by a designated SB adapter. With the server cluster, server instances can work with multiple SB adapters simultaneously, allowing a distributed SB adapter infrastructure to support a large number of NEs or a geographically separated network topology. Each SB adapter can select an instance of service using the load balancer based on certain criterion (e.g., selecting the lightest loaded server) to establish the association between the SB adapter and server instance. SB adapter modules can also be separated from NMS server 332 and run on separate workstations. Thus the network can be logically or physically partitioned in different management domains by configuring for each NE a SB adapter to handle events from that NE.

Figure 3D is a flowchart illustrating a technique for transferring information (e.g., traps) from an NE in a partitioned network to server cluster 332. More specifically, the network is partitioned to different management domains in which each NE belongs to one management domain (396). Each domain is associated with one SB adapter (397). The information that originated from the NEs in a management domain is transferred to a configured SB adapter (398). That is, a configured SB adapter is pre-selected to handle events from the NEs in a management domain. For example, an adapter can register its IP address in all NEs in a management domain so that all NEs send traps to that SB adapter. From then on, the information follows the uplink information flow in Figure 3C to be passed to a specific server instance and then to the OSS for processing (399). In some embodiments, the information is transferred to a designated application server or servers within cluster 332 wherein the designation was predetermined. That is, the SB adapter can be configured to communicate with certain registered server modules (instances). Because all the server instances are writing to the same database, the overall network view can be accessed from any partitioned region. In one embodiment, the SB adapters running on different workstations communicate with each other via RMI transporting over TCP/IP.

The NMS architecture presented can provide significant benefits of scalability and performance optimization. It can enable incremental addition of network management resources (such as server processing power, database memory) on an as needed basis without network operation interruption as the network grows. The NMS based on this

architecture can truly serve carriers' large scale network management requirements in a most optimized way.

Although the foregoing embodiments have been described in some detail for purposes of clarity of understanding, the invention is not limited to the details provided. There are many alternative ways of implementing the invention. The disclosed embodiments are illustrative and not restrictive.

WHAT IS CLAIMED IS:

CLAIMS

1. A method of communicating in a network management system, including:

transferring information from an application server to a gateway that processes the information;

transferring the gateway processed information from the gateway to a plurality of adapters associated with the gateway that process the gateway processed information; and

transferring the adapter processed information from one of the adapters to a client.

2. The method of claim 1, wherein the gateway is one of a plurality of gateways.

3. The method of claim 1, wherein the gateway is one of a plurality of physically or logically separate gateways.

4. The method of claim 1, wherein the gateway is a physically and logically separate machine from the application server.

5. The method of claim 1, wherein the adapters convert protocol specific messages into commonly formatted messages.

6. The method of claim 1, further including processing common functions associated with the information before transferring the information to the adapters.

7. The method of claim 1, wherein the information is associated with an event that originated on a network element.

8. The method of claim 1, wherein the adapters are software modules that run on Java virtual machines.

9. The method of claim 1, wherein the adapters communicate with the application server over an RMI interface.

10. A method of communicating in a network management system, including:

transferring information from an operations support system to a plurality of adapters associated with a gateway;

transferring the information from the adapters to the gateway; and

transferring the information from the gateway to an application server.

11. A method of communicating in a network management system, including:

transferring information to a selected application server based on a load balancing scheme; and

transferring the information from the selected server to a network element via an adapter.

12. The method of claim 10, wherein information is transferred from a gateway, operation support system, or GUI to a selected application server.

13. A method of communicating in a network management system, including:

transferring information from a network element to an adapter;

transferring the information from the adapter to a selected application server based on a load balancing scheme.

14. The method of claim 12, further including:

transferring the information from the selected server to a gateway, operation support system, or GUI.

15. The method of claim 10 or 12, wherein the load balancing scheme is based on selecting the server with the lightest load.

16. The method of claim 10 or 12, wherein the application server is one of a plurality of application servers selected.

17. The method of claim 10 or 12, wherein the application server is a server instance in the J2EE application server architecture.

18. A method of communicating in a network management system, including:

communicating an event from a network element to a configured adapter wherein the configured adapter is preselected to handle events from the network element; and

transferring information associated with the event from the configured adapter to an application server.

19. The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from a group of network elements.

20. The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein each adapter is preselected to handle events from different groups of network elements.

21. The method of claim 17, wherein the adapter is one of a plurality of adapters, wherein one or more adapters is preselected to handle events from a group of network elements.

22. The method of claim 17, further including transferring information associated with the event from the application server to a gateway, OSS, or GUI.

23. The method of claim 17, wherein the application server is preselected to handle events from the network element.

24. The method of claim 17, wherein the application server is selected based on a load balancing scheme.

25. The method of claim 17, wherein the event is a trap or performance management data.

26. The method of claim 17, wherein the adapter is on a separate physical machine from the application server.

27. The method of claim 17, wherein the information is transferred to a plurality of application servers.

28. A network management system, including:

a gateway configured to receive information from an application server;

a plurality of adapters configured to receive the information from the gateway; and

an OSS configured to receive the information from the adapters;

wherein the adapters are associated with the gateway.

29. A network management system, including:

a plurality of adapters configured to receive information from an OSS;

a gateway configured to receive the information from the adapters; and

an application server configured to receive the information from the gateway;

wherein the adapters are associated with the gateway.

30. A network management system, including:

an application server selected to receive information based on a load balancing scheme; and

a network element configured to receive information from the application server via an adapter.

31. A network management system, including:

an application server selected to receive information based on a load balancing scheme; and

a network element capable of receiving information from the application server via an adapter.

32. A network management system, including:

an adapter preselected to handle events from a network element; and

an application server configured to receive information associated with the event from the adapter.

NETWORK MANAGEMENT SYSTEM

ABSTRACT OF THE DISCLOSURE

A technique for communicating in a network management system is disclosed. The technique includes transferring information from an application server to a gateway that processes the information, transferring the gateway processed information from the gateway to a plurality of adapters associated with the gateway that process the gateway processed information, and transferring the adapter processed information from one of the adapters to a client.

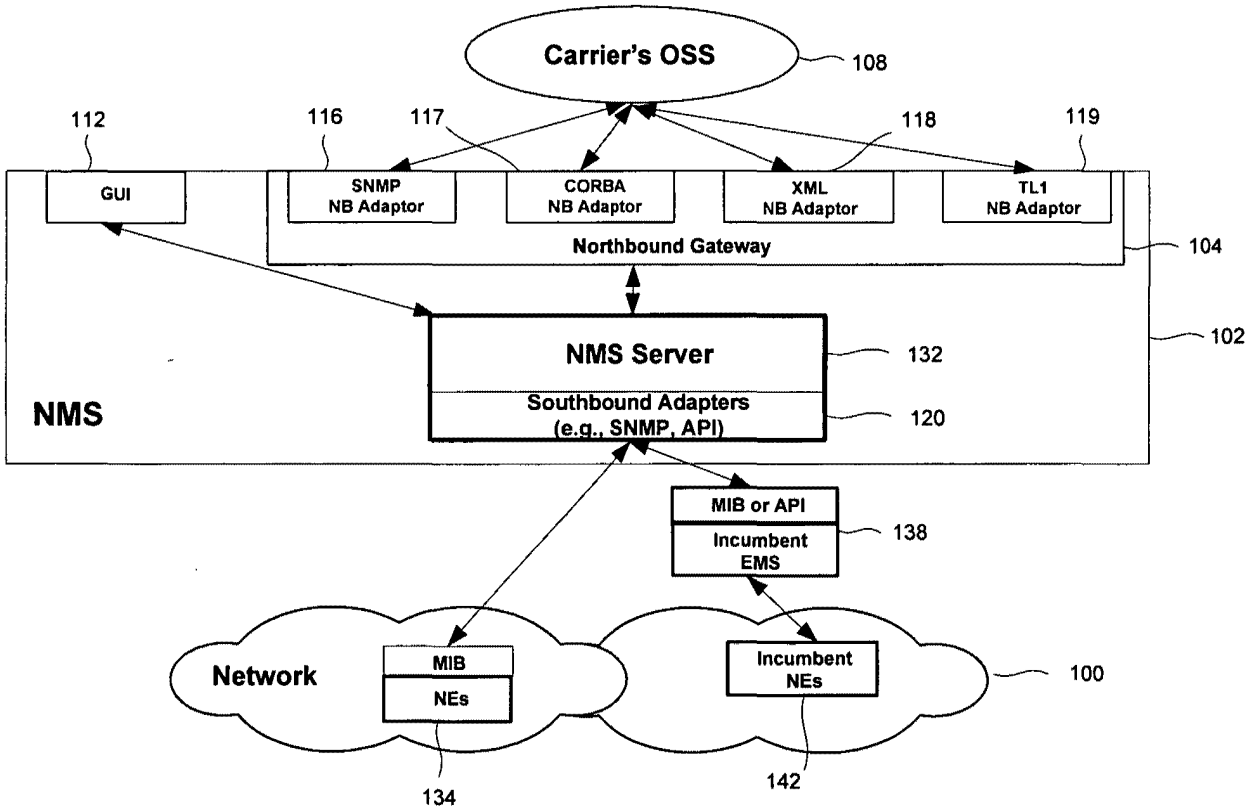


FIG. 1: An overall network management view

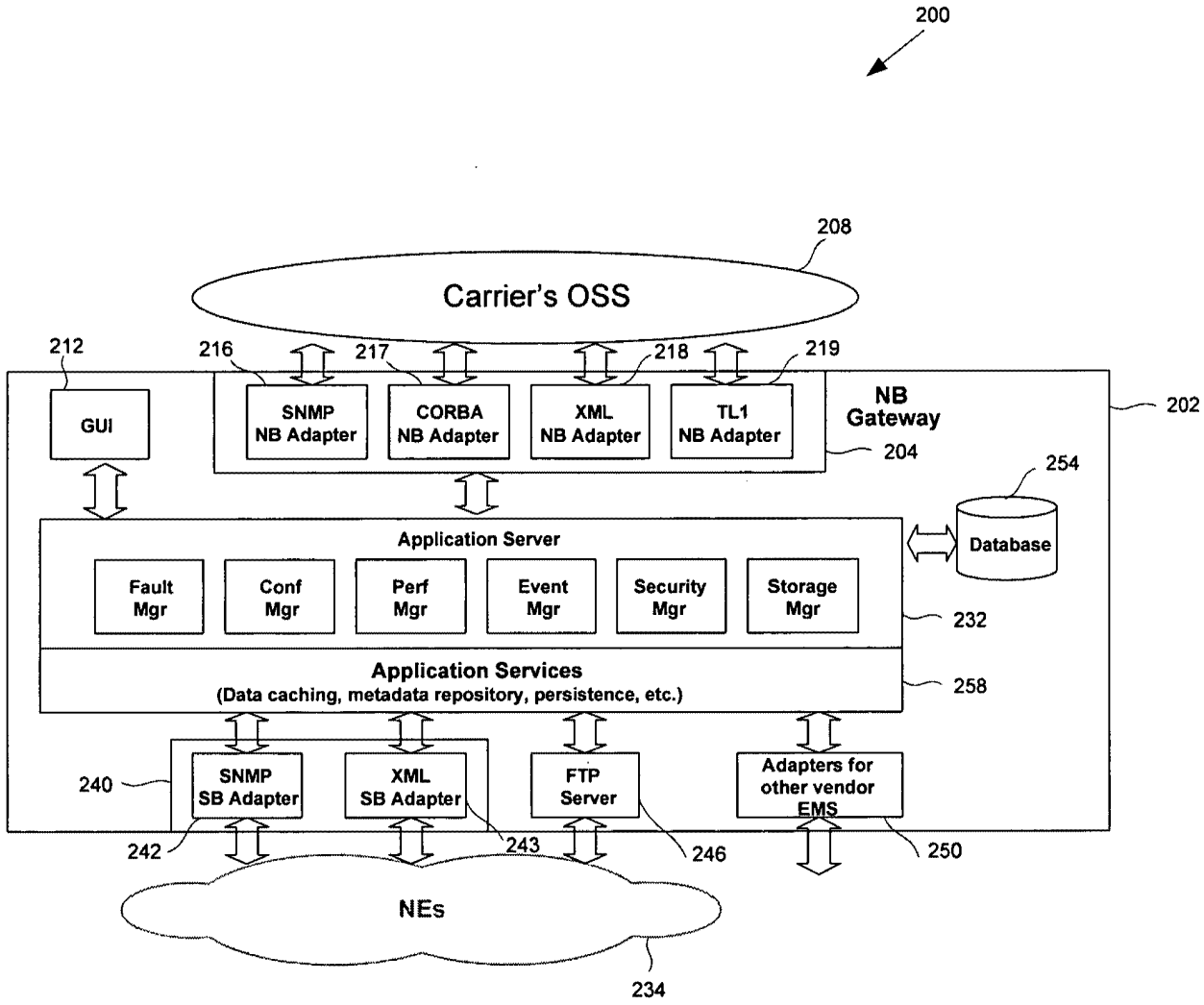


FIG. 2: NMS functional block diagram

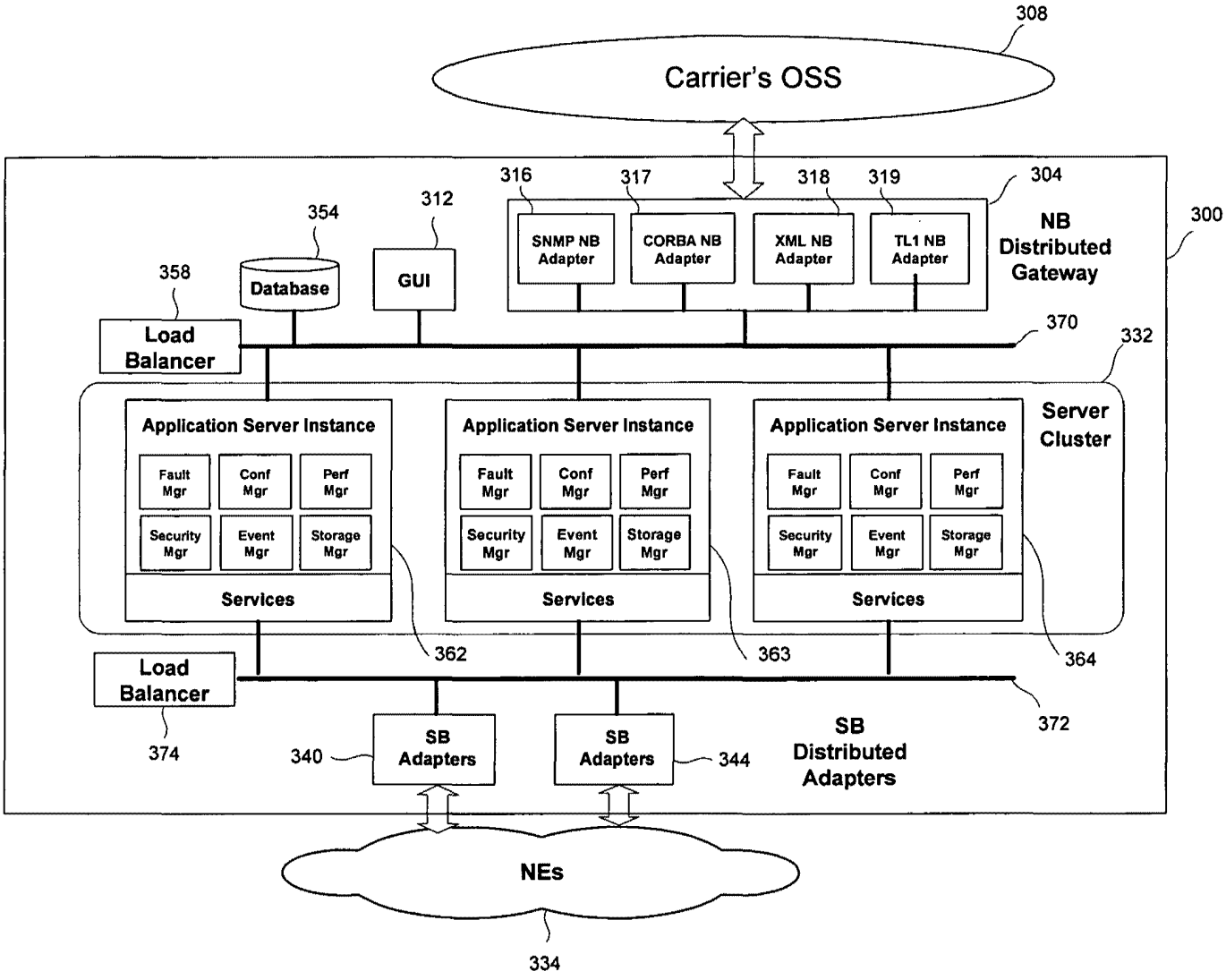


FIG. 3A: NB distributed gateway, SB distributed adapters, server cluster, & load balancers

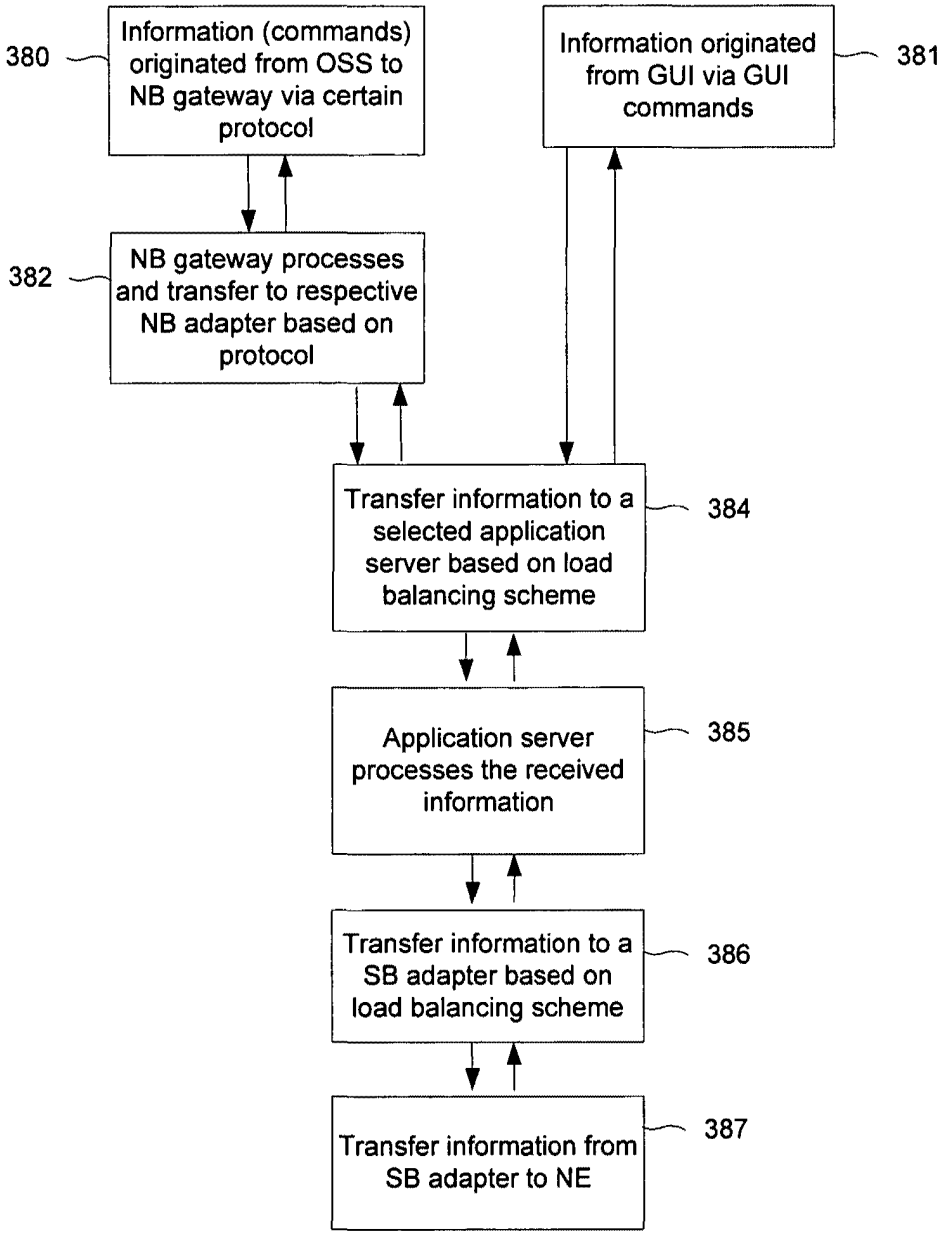


FIG. 3B: Downlink information flow (OSS or GUI as originator)

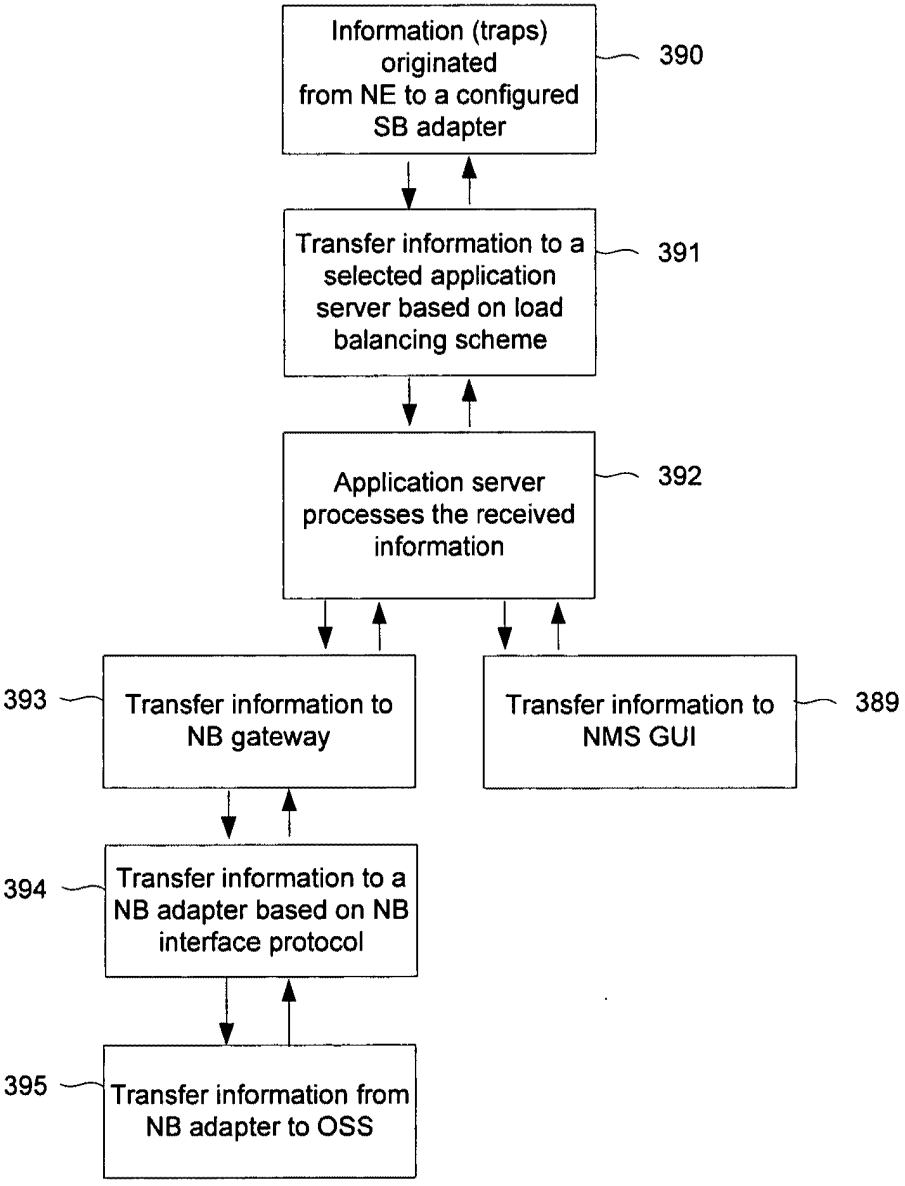


FIG. 3C: Uplink information flow (NE as originator)

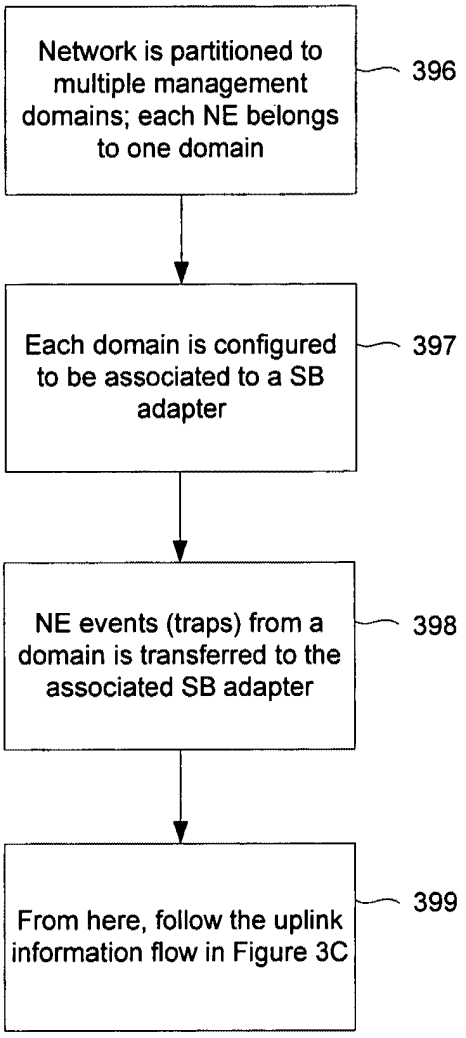


FIG. 3D: Uplink information flow with network partitioning

PATENT APPLICATION FEE DETERMINATION RECORD
Effective October 1, 2003

Application or Docket Number
10742573

CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS	32	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	44 minus 20=	* 24
INDEPENDENT CLAIMS	10 minus 3 =	* 7
MULTIPLE DEPENDENT CLAIM PRESENT		☐

* If the difference in column 1 is less than zero, enter "0" in column 2

SMALL ENTITY TYPE ☐		OR	OTHER THAN SMALL ENTITY	
RATE	FEE		RATE	FEE
BASIC FEE	385.00	OR	BASIC FEE	770.00
X$ 9=		OR	X$18=	432
X43=		OR	X86=	602
+145=		OR	+290=	
TOTAL		OR	TOTAL	1804

CLAIMS AS AMENDED - PART II

AMENDMENT A	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

SMALL ENTITY		OR	OTHER THAN SMALL ENTITY	
RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT B	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

AMENDMENT C	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA
Total	*	Minus	**	=
Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM				☐

RATE	ADDITIONAL FEE		RATE	ADDITIONAL FEE
X$ 9=		OR	X$18=	
X43=		OR	X86=	
+145=		OR	+290=	
TOTAL ADDIT. FEE		OR	TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."
***If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

1, 10, 11, 13, 14

MULTIPLE DEPENDENT CLAIM FEE CALCULATION SHEET

SERIAL NO. 10792573 | FILING DATE 12/19/03

APPLICANT(S)

CLAIMS

	AS FILED		AFTER 1ST AMENDMENT		AFTER 2ND AMENDMENT	
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TOTAL DEP.	34					
TOTAL CLAIMS	44					

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TOTAL CLAIMS						

PTO-1360 (Application edition) (10-03)