07-28-2004 FORM PTO-1595 (Modified) SHEET U.S. DEPARTMENT OF COMMERCE (Rev. 03-01) Patent and Trademark Office OMB No. 0651-0027 (exp.5/31/2002) P08/REV03 Tab settings → → 102801131 To the Director of the United States Patent and Trademark Office. Flease record the attached original documents or copy thereof. 1. Name of conveying party(ies): Name and address of receiving party(ies): **Netscape Communications Corporation** 466 Ellis Street Name: Sun Microsystems, Inc. Mountain View, CA 94043 Internal Address: Additional names(s) of conveying party(ies) ☐ Yes ☒ No 3. Nature of conveyance: Street Address: 4150 Network Circle ☐ Merger Security Agreement ☐ Change of Name City: Santa Clara _____ State: <u>CA</u> ZIP: 95054 Other Execution Date: 05/21/2002 Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) B. Patent No.(s) 09/867,508 05/29/2001 Additional numbers attached? ☐ Yes **⊠** No 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Jonathan P. Osha, Reg. No. 33,986 7. Total fee (37 CFR 3.41):.....\$ 40,00 Internal Address: OSHA & MAY L. Enclosed - Any excess or insufficiency should be credited or debited to deposit account 107/27/2004 GTON11 00000052 09867508 D1 FC:8021 40.00 DP Authorized to be charged to deposit account 8. Deposit account number: Street Address: 1221 McKinney, Suite 2800 50-0591 City: Houston State: TX ZIP: 77010 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. LOWATHAN OSH July 23, 2004 Name of Person Signing Signature Date 10 Total number of pages including cover sheet, attachments, and document: Mail documents to be recorded with required cover sheet information to:

Docket No.: 13220.020001; P5833

ASSIGNMENT (DOCUMENT) COVER SHEET ADDED PAGE(S)

DETAILS OF PRIOR APPLICATIONS BEING ASSIGNED RECORDAL (IF ANY) X In re application: Reel: 011883 Application No.: 09/867,790 Frame: 0735 Filing Date: 05/29/01 METHOD AND SYSTEM FOR GROUPING ENTRIES IN A DIRECTORY SERVER BY For: GROUP MEMBERSHIPS DEFINED BY ROLES In re application: Reel: 011883 Application No.: 09/867,789 Frame: 0746 Filing Date: 05/29/01 METHOD AND SYSTEM FOR CREATING AND UTILIZING MANAGED ROLES IN A For: **DIRECTORY SERVER** X In re application: Reel: 011883 Application No.: 09/867,788 Frame: 0791 05/29/01 Filing Date: METHOD AND SYSTEM FOR INCORPORATING FILTERED ROLES IN A DIRECTORY For: SERVER X In re application: Reel: 011917 Application No.: 09/867.516 Frame: 0546 Filing Date: 05/29/01 METHOD AND SYSTEM FOR NESTING ROLES IN A DIRECTORY SYSTEM For: 011917 X in re application: Reel: Application No.: 09/867,508 0535 Frame: Filing Date: 05/29/01 **ENUMERATED ROLES IN A DIRECTORY SYSTEM** For: In re application: Reel: 011872 Application No.: 09/867,791 Frame: 0531 Filing Date: 05/29/01 For: METHOD AND SYSTEM FOR SHARING ENTRY ATTRIBUTES IN A DIRECTORY SERVER USING CLASS OF SERVICE X In re application: Reel: 011881 Application No.: 09/867,595 Frame: 0824 Filing Date: 05/29/01 METHOD AND SYSTEM FOR DETERMINING A DIRECTORY ENTRY CLASS OF For: SERVICE BASED ON THE VALUE OF A SPECIFIER IN THE ENTRY

> PATENT REEL: 015598 FRAME: 0143

				
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X	*	09/867,517 05/29/01 SYSTEM FOR DETERMINING A DIREC OINTING TO A SINGLE TEMPLATE EN		011917 0643 FRY'S CLASS OF
x	Application No.: Filing Date:	09/895,751 06/28/01 SYSTEM FOR LOCALIZING A MARKUF	Reel: Frame:	NA NA GE DOCUMENT
X		09/932,298 08/17/01 APPARATUS FOR CENTRALIZING A C ATE AUTHORITY CLUSTER	Reel: Frame: ERTIFICA	012098 0620 TE REVOCATION LIST
x	In re application: Application No.: Filing Date: For: DELTA CRL E	09/902,253 07/09/01 NHANCEMENT	Reel: Frame:	NA NA
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X	In re application: Application No.: Filing Date: For: A CONFIGURA OPERATIONS	09/922,190 08/02/01 BLE MECHANISM AND ABSTRACT API	Reel: Frame: MODEL F	012060 0710 OR DIRECTORY

PATENT

REEL: 015598 FRAME: 0144

X In re application:

NA

Application No.: Filing Date:

60/310,529

Frame:

Reel:

NA

For:

08/06/01

CONFIGURING THE HIERARCHICAL STRUCTURE OF DIRECTORY

ENTRIES/MANAGING COMPOSITE DIRECTORY OBJECT

PATENT

REEL: 015598 FRAME: 0145

MEMORANDUM OF ASSIGNMENT OF OWNERSHIP

"Assignor": NETSCAPE COMMUNICATIONS CORPORATION

The Assignor identified above hereby confirms that the Assignor has for good and valuable consideration assigned and transferred, and does hereby assign and transfer, to SUN MICROSYSTEMS, Inc., Assignor's entire right, title and interest in and to those certain invention(s) of the titles listed below, including all worldwide patents, patent applications, trade secrets, copyrights, and other intellectual property rights therein, together with all claims for damages by reason of past infringement of any of the foregoing intellectual property rights, with the right to sue for, and collect, the same for SUN MICROSYSTEMS Inc.'s own use and benefit.

Sun Ref.#	Title of Invention	Patent Serial No. (if available)	Inventors
P4335 PSP	Application Server	60/148794	Tejkumar ARORA Dave LOWE Ramakrishna CHINTA Bjorn CARLSON Saumitra DAS Santosh HASANI Milton SOONG
P4441PSP	Web Server I	60/156305	Ruslan BELKIN Michael SHAVER Julien PIERRE Howard PALMER Viswanath RAMACHANDRAN Vinay BADAMI
P4442PSP	Web Server II	60/155711	Ruslan BELKIN Viswanath RAMACHANDRAN Howard PALMER Vinay BADAMI Julien PIERRE Michael SHAVER
P4524 NP	Cross/Multi-Process Sessions In Java	09/574398	Ruslan BELKIN
P4525 NP	Sticky Attach For JNI Thread	09/573698	Ruslan BELKIN
P4527 NP	Partitioning Web Server Pool Between Java & Non-Java Application	09/574302	Ruslan BELKIN Viswanath RAMACHANDRAN
P4528 NP	Mechanism For Optimizing Processing Of Client Requests		Vinay BADAMI Howard PALMER

Sun Ref.#	Title of Invention	Patent Serial No (if available)	Inventors
P4530 NP	Pluggable Session Manager	09/524775	Ruslan BELKIN
P4607 NP	Commerce Exchange Interaction Protocol	09/574334	Ryh-Wei YEH Lakshmi Narasimhar R Ankireddipally
P4610 NP	Mechanism For Optimizing The Processing Of Server-Parsed Entities	09/602637	Vinay BADAMI
P4620 NP	Xml Transaction Dag Structure	09/574335	Ryh-Wei YEH Lakshmi Narasimhar R Ankireddipally Dan NICHOLS
P4790 NP	System And Method For Enabling Application Server Request Failover	09/561704	Tejkumar ARORA Saumitra DAS
P4791 NP	Application Server Client Side Load Balancing	09/562425	Tejkumar ARORA Saumitra DAS
P4794 NP	System And Method For Caching Javaserver Pages(TM) Responses	09/561698	Bjorn CARLSON
P4795 NP	System And Method For Enabling Dynamic Class Reloading In An Application Server Environment	09/561697	Bjorn CARLSON Milton SOONG Santosh HASANI
P4796 NP	System And Method For Enabling Atomic Class Loading In An Application Server Environment	09/562,424	Bjorn CARLSON Milton SOONG Santosh HASANI
P4797 NP	System And Method For Enabling Distributed Application Server Events	09/561696	Saumitra DAS Ramakrishna CHINTA
P4798 NP	Application Server Message Logging	09/561700	Saumitra DAS Ramakrishna CHINTA
P4799 NP	Graceful Distribution In Application Server Load Balancing	09/561705	Tejkumar ARORA Saumitra DAS
P4800 NP	Application Server Sticky Load Balancing	09/562421	Tejkumar ARORA Saumitra DAS
P5044 NP	Mechanism For Enabling A Thread Unaware Or Non Thread Safe Application To Be Executed Safely In A Multi-Threaded Environment Mechanism For Enabling A Thread Unaware Or Non Thread Safe Application To Be Executed Safely In A Multi-Threaded Environment		Ruslan BELKIN Viswanath RAMACHANDRAN Ruslan BELKIN
P5045 NP	Mechanism For Evaluating Requests Prior To Disposition In A Multi- Threaded Environment	1	Ruslan BELKIN Viswanath RAMACHANDRAN
25191 NP	Even Distribution Of Stateful Application Server Requests		Гејkumar ARORA Saumitra DAS
P5296 NP	Method And System Hosting Of Multiple Billers In An Internet Bill Presentment And Payment Environment	S P P	Praveena VARADARAJAN, Shailendra GOEL Manish Krishnarao KALBANDE Melinda NASIF Ryan NGUYEN Thuy NGUYEN

Sun Ref.#	Title of Invention	Patent Serial No (if available)	Inventors
P5296 PSP	Multi-Hosting Apparatus For Billing Applications	60/214248	Praveena VARADARAJAN, Shailendra GOEL Manish Krishnarao KALBANDE Melinda NASIF Ryan NGUYEN Thuy NGUYEN
P5653 NP	Defining And Creating Custom Data Fields Within Process Management Software	09/823001	Albert TAM Michael Anthony SIJACIC Edwin KHODABAKCHIAN Michael CHMIELEWSKI
P5792 NP	Access Control For An E-Commerce Application	09/956083	Madhu KRISHNAPURAM Stayton D. ADDISON Shreenivas KAND Mangesh GONDHALEKAR
P5793 NP	Conflict Resolution In An E- Commerce Rules Engine	09/969635	Dimitri KOUBENSKI Daniel KOUKKA Stayton D. ADDISON
P5794 NP	Method And System For The Development Of Commerce Software Applications	10/021016	Alexandre DROBYCHEV Nirupama MALLAVARUPU Ching-Wen Alan CHU James KONG
P5795 NP	Import/Export Utility	09/930160	Leonid KHODULEN Vsevolod KAMYSHENKO Andrei SKALDIN
P5796 NP	Inheritance And Relationship To Directory Information In An E- Commerce Rules Engine	09/969634	Dimitri KOUBENSKI Daniel KOUKKA Stayton D. ADDISON
P5797 NP	System And Method For Providing A Persistent Object Framework For Managing Persistent Objects	09/940580	Keith HANKIN James KONG Ching-Wen Alan CHU Nirupama MALLAVARUPU
P5798 NP	Profile Management For Upgrade Utility	09/931037	James KONG Alexandre KRAVTCHENKO Vsevolod KAMYSHENKO
P5829 NP	Method And System For Grouping Entries In A Directory Server By Group Memberships Defined By Roles	[Peter ROWLEY David BOREHAM Mark SMITH
P5830 NP	Method And System For Creating And Utilizing Managed Roles In A Directory Server		Peter ROWLEY Mark SMITH David BOREHAM
P5831 NP	Method And System For Incorporating Filtered Roles In A Directory Server		Peter ROWLEY Mark SMITH David BOREHAM
P5832 NP	Method And System For Nesting Roles In A Directory System	. [1	Peter ROWLEY Mark SMITH David BOREHAM
P5833 NP	Enumerated Roles In A Directory System	[1	Peter ROWLEY Mark SMITH David BOREHAM

Sun Ref.#	Title of Invention	Patent Serial No. (if available)	Inventors
P5834 NP	Method And System For Sharing Entry Attributes In A Directory Server Using Class Of Service		Peter ROWLEY David BOREHAM
P5835 NP	Method And System For Determining A Directory Entry Class Of Service Based On The Value Of A Specifier In The Entry	09/867595	Peter ROWLEY David BOREHAM
P5836 NP	Method And System For Determining A Directory Entry's Class Of Service In An Indirect Manner	09/867594	Peter ROWLEY David BOREHAM
P5837 NP	Method And System For Determining A Directory Entry's Class Of Service By Pointing To A Single Template Entry	09/867517	Peter ROWLEY David BOREHAM
P5838 NP	Directory Server Mapping Tree	09/993,919	Gilles BELLATON Robey POINTER Mark SMITH
P5839 NP	Supporting Access Control Checks In A Directory Server Using A Chaining Backend Method	10/001,939	Gilles BELLATON Mark SMITH Sylvain DULOUTRE
P5840 NP	Entry Distribution In A Directory Server	09/844020	Gilles BELLATON Sylvain DULOUTRE Mark SMITH
P5841 NP	Virtual Attribute Service In A Directory Server	ŕ	Mark SMITH David BOREHAM Peter ROWLEY
P5842 NP	Directory Server Software Architecture		Mark SMITH Mark WAHL John MERRELLS
P5843 NP	Change Sequence Number Generator		Mark SMITH Pinaki SHAH Olga NATKOVICH Gordon GOOD John MERRELLS Ludovic POITOU
P5844 NP	Update Resolution Procedure For A Directory Server	j	Mark SMITH John MERRELLS Olga NATKOVICH Gordon GOOD Rich MEGGINSON
P5845 NP	Replication Architecture For A Directory Server	J C	Mark SMITH John MERRELLS DIga NATKOVICH Gordon GOOD Rich MEGGINSON Ludovic POITOU
P5846 NP	Server		Mark SMITH Gordon GOOD
P5847 NP	Directory Server Schema Replication	· ·	Mark SMITH Gordon GOOD

Sun Ref.#	Title of Invention	Patent Serial No. (if available)	Inventors
P5848 NP	Replica Update Vectors	09/993937	Mark SMITH Pinaki SHAH Olga NATKOVICH Gordon GOOD John MERRELLS
P5849 NP	UniqueID-Based Addressing In A Directory Server	09/871457	Mark SMITH Olga NATKOVICH John MERRELLS Gordon GOOD
P5850 NP	Bulk Import In A Directory Server	09/877706	Mark SMITH Robey POINTER David BOREHAM Gilles BELLETON
P5935 NP	Automated And Customizable Localization Parser Utility	09/895751	Kenneth EBBS Lawrence WHITE Arvin PRABHAKAR
P5936 NP	Client Controlled Data Recovery Management	09/931004	Nang Kon KWAN
P5937 NP	Method And System For Answering Online Certificate Status Protocol (OCSP) Requests Without Certificate Revocation Lists (CRL)	09/867648	Nang Kon KWAN
P5948 NP	Methods And System For Defining And Creating Custom Activities Within Process Management Software	09/867650	Albert TAM Edwin KHODABCHIAN Michael Anthony SIJACIC Michal CHMIELEWSKI
P5949 NP	Methods And System For Integrating XML Based Transactions In An Electronic Invoice Presentment And Payment Environment	09/867649	Michael Anthony SIJACIC Noel R.GONSALVES Michal CHMIELEWSKI
P5950 NP	Methods And System For Performing Electronic Invoice Presentment And Payment Dispute Handling With Line Item Level Granularity		Blake GROVES Michal CHMIELEWSKI Michael Anthony SIJACIC
P5953 NP	Methods And System For Performing Business-To-Business Electronic Invoice Presentment And Payment With Line Item Level Granularity		Praveena VARADARAJAN Shailendra GOEL Blake GROVES Michal CHMIELEWSKI Michael Anthony SIJACIC Ryan NGUYEN
P5957 NP	Methods And Systems For Delivery Of Information Upon Enrollment In An Internet Bill Presentment And Payment Environment		Manish Krishnarao KALBANDE Marc Jeston BYRD
P5977 NP	Mechanism For Reconfiguring A Server Without Incurring Server Down Time	•	Christian KAISER Rick SWIFT
P6043 NP	Method And Apparatus For Centralizing A Certificate Revocation List In A Certificate Authority Cluster		Ajay SONDHI Christina FU

Sun Ref.#	Title of Invention	Patent Serial No. (if available)	Inventors
P6053 NP	Delta CRL Enhancement	09/902253	Michelle ZHAO
P6054 NP	CRL Last Changed Extension Or Attribute	09/902254	Michelle ZHAO
P6055 NP	High Performance Persistent CRL Cache	09/902246	Andrew WNUK
P6180 NP	Configurable Mechanism And Abstract API Model For Directory Operations	09/922190	Chi-Hung FU Dilli DORAI Hin MAN Pransanta BEHERA
P6350 NP	Macro Based Access Control	10/045682	Robert BYRNE Pransanta BEHARA
P6434 NP	System And Method For Enabling Failover For An Application Server Cluster	Filed on 3/12/02	Darpan DINKER Sudhir TONSE Suveen R. NADIPALLI Pramod GOPINATH
P6437 NP	System And Method For Enabling Failover For An Application Server Cluster CHECK TITLE - (same as 6434 above?) Distribution Token Manager	10/043,809	Darpan DINKER Sudhir TONSE Suveen R. NADIPALLI Pramod GOPINATH
P6546 NP	Metadata Aware Enterprise Application Integration Framework For Application Server Environment	10/051,441	Pavan BHATNAGAR Venkateswar AMIRISETTY
P6546 PSP	Metadata-Aware Enterprise Application Integration Framework For Application Server Environment	1	Pavan BHATNAGAR Venkateswar AMIRISETTY
P6551 NP	Method And System For Managing A Directory With A Template	L	Atul BHANDARI Roger KITAIN
P6857 PSP	Configuring The Hierarchical Structure Of Directory Entries/Managing Composite Directory Object		Pinaki ALLAVARPU Pransanta BEHERA Atul BHANDARI Roger KITAIN

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Signature:

Printed Name: Glo Hunt

Title: SVP, Business Afa

Date of Signature: 5.21.02