

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT
EFFECTIVE DATE:	01/25/2007

CONVEYING PARTY DATA

Name	Execution Date
REDBACK NETWORKS INC.	12/29/2009

RECEIVING PARTY DATA

Name:	ERICSSON AB
Street Address:	S-164 83
City:	STOCKHOLM
State/Country:	SWEDEN

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	09999585
Application Number:	09835704

CORRESPONDENCE DATA

Fax Number: (408)720-8383

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Correspondent Name: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Address Line 1: 1279 OAKMEAD PARKWAY

Address Line 4: SUNNYVALE, CALIFORNIA 94085-4040

ATTORNEY DOCKET NUMBER: 4906G000

NAME OF SUBMITTER: Daniel M. De Vos

Total Attachments: 38

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PATENT
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ASSIGNMENT OF PATENT(S) AND/OR PATENT APPLICATION(S)

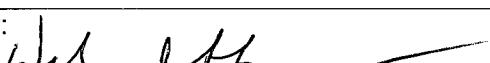
This Nunc Pro Tunc Assignment is effective the 25th day of January 2007 by and between the below-identified Assignor and Assignee. For good and valuable consideration, receipt of which is hereby acknowledged, Redback Networks Inc., a Delaware corporation having a place of business at 100 Headquarters Drive, San Jose, CA 95134 (the "Assignor"), hereby sells, assigns, and transfers to Ericsson AB, a Swedish corporation having a place of business at S-164 83 Stockholm, Sweden (the "Assignee"), its successors and assigns, the entire right, title and interest throughout the world to the extent held by the Assignor (if any) in the inventions (including Utility and/or Designs) of the following letters patent(s) and/or patent application(s):

Patent Application and/or Patent Number(s)	Filing Date and/or Issue Date
7,035,256	April 25, 2006
09/835,704	April 16, 2001

and all patent application(s) and letters patent(s) of every country for such inventions, including divisions, reissues, continuations, continuations-in-part, renewals, and extensions thereof, and all rights of priority resulting from the filing of such patent application(s), and any and all causes of action for past, present, and/or future infringement of any of the letters patent(s), or relating to any inventions described therein, including the right to collect royalties for all such infringements and the right to sue on all such causes of action for their own use and benefit and the use and benefit of their successors and assigns; each and every of the foregoing rights, titles and interests herein assigned to be held and enjoyed by Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor had this Assignment not been made.

For the same consideration, Assignor authorizes Assignee to apply for letters patent(s) of foreign countries for such inventions, and to claim all rights of priority without further authorization from Assignor.

For the same consideration, Assignor agrees to execute or use its best efforts to cause the execution of all papers necessary or available in connection with such United States and foreign patent application(s) without charge to Assignor, its successors and assigns.

Assignor: Redback Networks Inc.
By:

Printed Name: William Shetye
Title: CEO
Date: December 29, 2009

Assignee: Ericsson AB
By:
Printed Name:
Title:
Date:

ASSIGNMENT OF PATENT(S) AND/OR PATENT APPLICATION(S)

This Nunc Pro Tunc Assignment is effective the 25th day of January 2007 by and between the below-identified Assignor and Assignee. For good and valuable consideration, receipt of which is hereby acknowledged, Redback Networks Inc., a Delaware corporation having a place of business at 100 Headquarters Drive, San Jose, CA 95134 (the "Assignor"), hereby sells, assigns, and transfers to Ericsson AB, a Swedish corporation having a place of business at S-164 83 Stockholm, Sweden (the "Assignee"), its successors and assigns, the entire right, title and interest throughout the world to the extent held by the Assignor (if any) in the inventions (including Utility and/or Designs) of the following letters patent(s) and/or patent application(s):

Patent Application and/or Patent Number(s)	Filing Date and/or Issue Date
7,035,256	April 25, 2006
09/835,704	April 16, 2001

and all patent application(s) and letters patent(s) of every country for such inventions, including divisions, reissues, continuations, continuations-in-part, renewals, and extensions thereof, and all rights of priority resulting from the filing of such patent application(s), and any and all causes of action for past, present, and/or future infringement of any of the letters patent(s), or relating to any inventions described therein, including the right to collect royalties for all such infringements and the right to sue on all such causes of action for their own use and benefit and the use and benefit of their successors and assigns; each and every of the foregoing rights, titles and interests herein assigned to be held and enjoyed by Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor had this Assignment not been made.

For the same consideration, Assignor authorizes Assignee to apply for letters patent(s) of foreign countries for such inventions, and to claim all rights of priority without further authorization from Assignor.

For the same consideration, Assignor agrees to execute or use its best efforts to cause the execution of all papers necessary or available in connection with such United States and foreign patent application(s) without charge to Assignor, its successors and assigns.

Assignor: Redback Networks Inc.
By:
Printed Name: William Sherry
Title: CEO
Date:

Assignee: Ericsson AB
By:
Printed Name: John Han
Title: VP Patent Development
Date: February 18, 2010

Prepared (also subject responsible if other)	No.		
Approved	Checked	Date 2007-10-19	Rev PA1

Redback Patents and Core Technology Agreement and Assignment

This Redback Patents and Core Technology Agreement and Assignment is deemed to govern the past conduct of the parties, and to be effective as of January 25, 2007, by and between Redback Networks Inc., a Delaware corporation having its principal place of business in San Jose, California ("RBU"), and Ericsson AB, a Swedish corporation having its principal place of business in Stockholm, Sweden ("EAB").

WHEREAS, RBU is the owner of all the right, title and interest in patents and core technology used in its business operations; and

WHEREAS, EAB desires to acquire all of RBU's right, title and interest in the patents and core technology used in its business operations.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. "Redback Patents and Core Technology" means the combination of processes, patents, and trade secrets that are the building blocks for current and planned RBU Products, and comprises awarded patents, filed patent applications, patentable technology and core architectures that are used across RBU's Products and form the major part of the architecture of both current and the planned future products releases, as such term was used by Ericsson and RBU in the negotiations for the acquisition of RBU by Ericsson and as used in the Valuation Report prepared by Duff & Phelps with respect to the acquisition of RBU.
2. "Redback Products" means products sold or being developed by RBU as of January 25, 2007, including, but not limited to SMS, SmartEdge and NetOp, as well as all future releases and improvements of such products.
3. RBU hereby assigns to EAB, its successors and assigns, all right, title and interest in and to the Redback Patents and Core Technologies, including but not limited to those patents and patent applications listed on Schedule A attached hereto, all divisions, reissues, continuations, continuations-in-part, renewals, and extensions thereof, and all rights of priority resulting from the filing of such patent applications, and any and all causes of action for past, present, and/or infringement of the Redback Patents and Core Technologies, including the right to collect royalties for all such infringements. The assignment set forth herein is deemed by the parties to be effective as of January 25, 2007.



Ericsson Internal

2 (3)

Prepared (also subject responsible if other)	No.			
Approved	Checked	Date 2007-10-19	Rev PA1	Reference

4.

5.

6. RBU shall take such other actions as are requested by LME to evidence the transactions described in this Agreement and Assignment. Redback authorizes EAB to apply for patents in foreign countries for all inventions, and to claim rights of priority without further authorization from RBU.

7.

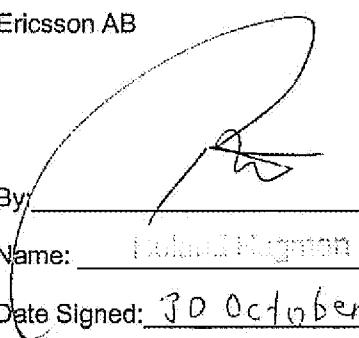
Prepared (also subject responsible if other)		No.		
Approved	Checked	Date	Rev	Reference
		2007-10-19	PA1	

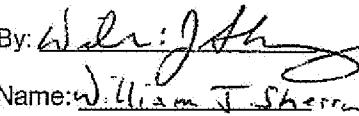
IN WITNESS WHEREOF, the parties hereto cause this Redback Patents and Core Technology Agreement and Assignment to be signed below.

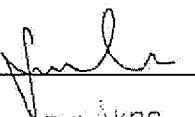
Redback Networks Inc.

By: 
Name: KA DeNuccio
Date signed: 10/30/07

Ericsson AB

By: 
Name: Pauline Nilsson
Date Signed: 30 October 2007

By: 
Name: William J Sherry
Date signed: 10 - 30 - 07

By: 
Name: Lars Åkne
Date signed: 30 October 2007

REDBACK ACTION ITEMS CHART OF DISCLOSURES - P# THEN FILE DATE THEN RATING SORT				
Matter #	Ser. No.	Title	Filing Date	
P001.C3US	11/869,746	Domain Isolation Through Virtual Network Machines	10/9/07	
P001.CUUS	10/409,215 (Cont. of 6,609,153)	Domain Isolation Through Virtual Network Machines	4/7/03	
P001.DCUUS		Dynamic Binding of Network Services	10/9/07	
P002.COMUS		A Method and Apparatus for Switching Data of Different Protocols	12/3/00	
P002.ZUS	60/258,760	A Method and Apparatus for Switching Data of Different Protocols	12/3/00	
P003.CUUS	11/414,093 (Continuation of 09/699,198, PAT. 7,054,321)	Tunneling Ethernet Remote Circuit Provisioning	4/28/06	
P005.CUUS	11/177,524	Method and Apparatus for Controlling Service Access	7/7/05	
P006.COMUS		Method and Apparatus for Controlling Service Access	10/27/00	
P006.COMUS		Method and Apparatus for Controlling Service Access	10/27/00	
P007.US	09/699,238	Tunnel Groups	10/27/00	
P010.COMUS		Creating Visibility of an Access Point	10/27/00	

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REEL: 024047 FRAME: 0167

Matter #	Ser. No.	Title	Filing Date
P010.US	09699137	Creating Visibility of an Access Point	10/27/00
P013.ZUS	60/331,375	System And Method For Providing Tunnel Session Mobility	12/20/00
P014.D2US	11/035,639 (Divisional of 09/751,764)	Any Size and Location of Concatenated Packet Data Across SONET Frames in a SONET Signal	1/13/05
P016.GB3	314528.1	A Method and Apparatus for Variable Rate Pipes	12/20/01
P016.SG	200303521-9	A Method and Apparatus for Variable Rate Pipes	12/20/01
P016.WO	US0150012	A Method and Apparatus for Variable Rate Pipes	12/20/01
P016.XUS	09/999,503 (C P of 09/887,299)	Method and Apparatus for a Variable Rate Pipe on a Linear Connection	10/22/01
P016.ZUS	60/258,785	A Method and Apparatus for Variable Rate Pipes	12/30/00
P018.US	10/035,560	Method and Apparatus for Combining 8b/10b Encoding and Error Correction Control	10/23/01
P020.CUS	11/259,964 (which is a divisional of 09/941,223)	Method and Apparatus for Virtual Private Networks	10/26/05
P021.COMUS		Protocol for Transactional Fault Tolerance in a Network Element	6/20/01
P024.US	09834,385	Method and Apparatus for Multiple Communications Sessions	4/13/01
P027.GB3	GB 2390 962 A	Method and Apparatus for Sync Hunting Signals	2/21/02
P027.SG	200305725-4	Method and Apparatus for Sync Hunting Signals	2/21/02

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Matter #	Ser. No.	Title	Filing Date
P027 WO	US0265058B	Method and Apparatus for Sync Hunting Signals	2/21/02
P027 ZUS		Method and Apparatus for Sync Hunting Signals	3/31/01
P027 ZUS	60/280,694	Method and Apparatus for Sync Hunting Signals	3/31/01
P028 ZUS	60/258,759	A Method and Apparatus for a Hybrid Variable Rate Type	12/30/00
P029 WO	US02/04603	Stuffing Filter Mechanism for Data Transmission Signals	2/14/02
P029 ZUS	60/280,682	Stuffing Filter Mechanism for Data Transmission Signals	3/31/01
P030 SG	200305033-3	Alignment of TDM Over Packet using a framed or an unframed technique for both DS1 and DS3	2/14/02
P030 WO	US02/04451	Alignment of TDM Over Packet using a framed or an unframed technique for both DS1 and DS3	2/14/02
P030 ZUS	60/280,661	Alignment of TDM based signals or packet transmission using framed and unframed operations	3/31/01
P032 EPO	1994414.9	Method and Apparatus for Processing of Multiple Protocols within Data Transmission	9/24/03
P032 JP	2002-563659	Method and Apparatus for Processing of Multiple Protocols within Data Transmission Signal	12/21/01
P032 SG	200303530-0	Method and Apparatus for Processing of Multiple Protocols within Data Transmission Signal	12/21/01
P032 WO	US0150087	Method and Apparatus for Processing of Multiple Protocols within Data Transmission Signal	12/21/01

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REEL: 024047 FRAME: 0169

Matter #	Ser. No.	Title	Filing Date
P033 US	10/046,586	Bit Synchronous Engine and Method	10/19/01
P034 WO	US015/1039	Method and Apparatus for Processing of Multiple Protocols within Data and Control Channels in Data Transmission Signals	12/21/01
P035 US	10/113,009 (Claims benefit of 60/280,568)	Updating Provisioning Data in a Network Element	3/29/02
P036 ZUS	60/280,568	Method and Apparatus for Shadowing Network Element Control Cards	3/30/01
P036 US	10/109,521 (Claims benefit of 60/333,845)	Method and Apparatus for Processing Channelized and Unchannelized Data Within a Signal (Related to RB-094)	3/28/02
P036 ZUS	60/333,845	Method and Apparatus for Processing Channelized and Unchannelized Data Within a Signal (Related to RB-094)	11/28/01
P037 US	09/823,781	Formation of Mobile Agents to Provide a Synchronized View in Network Management (Related to RB-147, RB-149, RB-150)	3/31/01
P040 ZUS	60/300,041	Use of transaction agents to perform distributed transactions	6/20/01
P041 US	09/903,243	METHOD AND APPARATUS FOR FA LURE ANALYSIS	7/11/01
P042 US	09/823,773	Method and Apparatus to Distribute the Presence of Servers and Their Encapsulated Applications	3/31/01

PATENT

REEL: 024047 FRAME: 0170

Matter #	Ser. No.	Title	Filing Date
P043 COMU S		Fast DCC Support for: 1) the High Level TDM Provisioning, & Monitoring of alarm status on more channels due to high channelization, & 2) Packet Statistics: a) packet interfaces of particular protocols; b) how many and of what type circuits. (Related to RB-012) Use PPP on DCC. Allows to use TCP/ P applications and JAVA.	12/22/01
P044 GB3	314525.7	The Method and Apparatus for a Non-BLSR Protected Layer 2/3 Channel	12/22/01
P044 SG	200303568-0	The Method and Apparatus for a Non-BLSR Protected Layer 2/3 Channel	6/22/01
P044 US	09/887,302 (Claims benefit of 6/0/258,761)	The Method and Apparatus for a Non-BLSR Protected Layer 2/3 Channel	12/22/01
P044 WO	US0149822	The Method and Apparatus for a Non-BLSR Protected Layer 2/3 Channel	12/30/00
P045 ZUS	60/258,761	The Method and Apparatus for a Non-BLSR Protected Layer 2/3 Channel	2/1/99
P045 ZUS	60/118,156	Packet Classification Methods and Apparatus Methods and Apparatus for Deploying Quality of Service Policies on a Data Communication Network and Packet Scheduling Methods and Apparatus	
P046 WO	CA000109398	Methods and Apparatus for Deploying Quality of Service Policies on a Data Communication Network	8/17/00

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REEL: 024047 FRAME: 0171

Matter #	Ser. No.	Title	Filing Date
P047 WO	CA00100937	Packet Scheduling Methods and Apparatus	8/17/00
P048 WO	CA00100939	Methods and Apparatus for Packet Classification with Multi-level Data Structure	8/17/00
P049 WO	CA00100949	Methods and Apparatus for Packet Classification with Multiple Answer Sets	8/17/00
P050 ZUS	60/252,065	Flow Admission Control Methods and Apparatus	11/21/00
P051 ZUS	60/252,585	Service Provisioning Methods and Apparatus	11/24/00
P052 US		Multi-Purpose Network Information Repository	

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Matter #	Ser. No.	Title	Filing Date
P052 ZUS	60/252,578	Multi-Purpose Network Information Repository	11/24/00
P053 ZUS	60/252,576	Policy Verification Method and Apparatus	11/24/00
P054 ZCA	2327001	Method and Apparatus for the Enumeration of Sets of Concurrently Scheduled Events	11/27/00
P055 ZCA	2326851	Policy Change Method and Apparatus	11/24/00
P056 ZUS		Packet Scheduling	11/27/01
P057 WO	PCT/US01/44608	Cache Retry Request Queue Scheduler for a Data Memory Access Having Multiple Channels	11/29/01
P058 EPO	1271568.6	Scheduler for a Data Memory Access Having Multiple Channels	11/29/01
P058 JP	2002-551659	Scheduler for a Data Memory Access Having Multiple Channels	11/29/01
P058 SG		Scheduler for a Data Memory Access Having Multiple Channels	11/29/01
P058 WO	PCT/US01/44580	Scheduler for a Data Memory Access Having Multiple Channels	11/29/01
P061 COMU S		Ring Network Element and the Ring Network Architectures it Enables	3/30/01
P061 COMU S		Ring Network Element and the Ring Network Architectures it Enables	3/30/01

PATENT

Matter #	Ser. No.	Title	Filing Date
P061 DUS	11/584,360 (Divisional of 09/823,871)	Ring Network Element and the Ring Network Architectures it Enables (Combined with RB- 005 and RB-173)	10/20/06
P063 ZUS	6/0334,486	Method and Apparatus for the Operation of a Storage Unit in a Network Element (Related to RB-113 – see if can combine)	11/29/01
P064 ZUS	6/0340,925	Method and Apparatus for Altering an Output Rate of a Data Storage Unit (Related to RB-114 – see if can combine)	12/7/01
P068 COMU S		Packet BLSR with Fully Shared Protection Channel	
P069 COMU S		Applied Linear 1 for N Protection (As opposed to linear 1 for 1 protection – the subject matter of P016 and P044)	
P072 CUS	11/260,775 (continuation of 09/872,936)	Method and Apparatus for Controlling the Admission of Data Into A Network Element	10/26/05
P076 COMU S		Method and Apparatus for Simultaneously Sync Hunting Signals (Related to RB-057, RB-058, RB-60)	4/16/01
P076.WO			4/12/02
P077 CUS	10/449,326 (cont of 09/873,037)	Method and Apparatus for Simultaneously Sync Hunting Signals	5/30/03
P077.WO	US02/11451	Method and Apparatus for Communication Between Network Elements	5/15/02
P078 SG	US02/15834	Method and Apparatus for Restart Communication Between Network Elements	5/14/02
P078 US	200307088- 5	Method and Apparatus for Process Sync Restart	6/20/01

PATENT

REEL: 024047 FRAME: 0174

Matter #	Ser. No.	Title	Filing Date
P078 WO	US0215322	Method and Apparatus for Process Sync Restart	5/14/02
P079 WO	US0215321	Method and Apparatus for Maintaining Consistent Data	5/14/02
P080 CUS	11/492,335 (Continuation of 7,082,610)	Method and Apparatus for Exception Handling In A Multi-Processing Environment	7/24/06
P080 WO	US0215709	Method and Apparatus for Exception Handling In A Multi-Processing Environment	5/15/02
P081 US	10/080,869 (Claims benefit of 60/340,982)	Method and Apparatus for Bandwidth Among Multiple Ports of a Network Element	2/21/02
P081 ZUS	60/340,982	Balancing Bandwidth Among Multiple Ports of a Network Element	12/7/01
P083 ZUS	60/334,250	Method and Apparatus for Processing Network Data Frames Using Alignment Information (Related to RB-170)	11/3/01
P084 WO	US0239468	Method and Apparatus for Unscheduled Flow Control in Packet Form	12/9/02
P085 XUS	10/285,937 (C P of 09/999,542)	Method and Apparatus for Protection of an Optical Network (Related to RB-016, RB-018 and RB-140)	10/31/02
P086 US	10/102,456 (Claims benefit of 60/362,208)	Method and Apparatus for Multiplexing and Demultiplexing Communications Signals	3/20/02
P086 ZUS	60/362,208	Method and Apparatus of Multiplexing and Demultiplexing Communication Signals	3/6/02

PATENT

REEL: 024047 FRAME: 0175

Matter #	Ser. No.	Title	Filing Date
P087 COMU S		FIG to deal with route Flips	
P089 ZUS	60/309,556	Method and Apparatus for Classifying Network Data	8/20/01
	P090 ZUS	60/309,580 Method and Apparatus for Classifying Network Data	8/20/01
	P091 US	10/193,504 (claims the benefit of 60/345,416) Method and Apparatus for Out-of-Order Processing of Packets	7/10/02
	P091 ZUS	60/345,416 Method and Apparatus for Out-of-Order Processing of Packets	12/31/01
	P092 US	10/334,648 (claims priority to 60/345,989) Method and Apparatus Providing for Invalidation in a Distributed Cache System	12/31/02
	P092 ZUS	60/345,989 Method and Apparatus Providing for Invalidation in a Distributed Cache System	12/31/01
	P093 US	Use A ROC To Solve Multicast	
	P094 DUS	11/409,193 (Divisional of 09/991,234) Method and Apparatus for Multiple Contexts and Layer 3 Virtual Private Networks	4/21/06

PATENT

REEL: 024047 FRAME: 0176

Matter #	Ser. No.	Title	Filing Date
P094 GB3		Method and Apparatus for Multiple Contexts and Layer 3 Virtual Private Networks	11/15/02
P094 US	09/991,234	Method and Apparatus for Multiple Contexts and Layer 3 Virtual Private Networks	11/17/01
P094 WO	US02/36832	Method and Apparatus for Multiple Contexts and Layer 3 Virtual Private Networks	11/15/02
P096 US	10/292,000 (Claims benefit of 60/344,122)	Method and Apparatus for Accessing Routing Data From Memory	11/12/02
P096 ZUS	60/344,122	Method and Apparatus for Accessing Routing Data From Memory	12/28/01
P097 US	10/291,999 (Claims benefit of 60/358,200)	Updating of Routing Data in a Network Element	11/12/02
P097 ZUS	60/358,200	Updating of Routing Data in a Network Element	3/28/02
P101 US	10/299,236 (Claims benefit of 60/358,079)	Method and Apparatus for Implementing a Switching Unit Including a Bypass Path	11/18/02
P101 ZUS	60/358,079	Method and Apparatus for Implementing a Switching Unit Including a Bypass Path	2/19/02
P102 US		LFM (Lock and Fence Manager) (builds on cache coherency) (Related to RB-199)	

PATENT

REEL: 024047 FRAME: 0177

Matter #	Ser. No.	Title	Filing Date
P103 ZUS	60/359,099	Processing Instructions Having Suffix Instructions	2/22/02
P104 US		Doing a Broadcast on the ICN (key to usefulness of the ICN Topology) (Related to RB-199 and RB-200) (Prior art is the "Omega Papers")	
P105 US	10/036,674	Method and Apparatus for Representing Label Switched Paths	12/31/01
P105 WO	US0241549	Method and Apparatus for Representing Label Switched Paths	12/27/02
P106 US	10/103,207 (Claims priority/bene fit of 60/347,365)	Method and Apparatus for Processing Labels	3/21/02
P106 ZUS	60/347,365	Method and Apparatus for Processing Label Identifiers	1/10/02
P109 US	10/327,555 (Claims benefit of 60/412,433)	Method and Apparatus for Out-of-Order Processing of Packets Using Linked Lists	12/20/02
P109 ZUS	60/442,433	Method and Apparatus for Out-of-Order Processing of Packets Using Linked Lists	9/20/02
P112 US	10/388,914 (Claims benefit of 60/367,233 and 60/363,967)	Network Element Having A Cross-Connect To Route Data To Traffic Cards Of Varying Functionality	3/13/03
P112 ZUS	60/363,967	A Network Element Having A Cross-Connect To Route Data To Traffic Cards Of Varying Functionality	3/4/02

Matter #	Ser. No.	Title	Filing Date
P112 ZUS	60/367,233	Network Element Having a Cross-Connect to Route Data to Traffic Cards of Varying Functionality	3/25/02
P113 US	10/602,481 (Claims priority to 60/390,630)	Switching of a Cross-Connect and a Timing Source in a Network Element	6/23/03
P113 ZUS	60/390,630	Switching of a Cross-Connect and a Timing Source in a Network Element	6/21/02
P114 CUS	11/809,053 (Continuation of 10/602,481)	Repeated Switching of a Cross-Connect and a Timing Source in a Network Element through the use of a phase adjuster	5/30/07
P115 ZUS	60/368,780	Hierarchical Circuit with Different Switching Decisions	3/27/02
P117 US	10/159,656 (claims priority to 60/375,650)	Method and Apparatus for Managing Resources of a Hybrid Network Element	5/31/02
P117 ZUS	60/375,650	Method and Apparatus for Managing Resources of a Hybrid Network Element	4/26/02
P122 EPO	3726459,5	Subscriber Service Selection Over Non-Channelized Media	4/25/03
P122 HK		Subscriber Service Selection Over Non-Channelized Media	6/29/05
P122 JP	2004-500262	Subscriber Service Selection Over Non-Channelized Media	4/25/03
P122 US	10/133,072	Subscriber Service Selection Over Non-Channelized Media	4/26/02
P122 WO	US0312862	Subscriber Service Selection Over Non-Channelized Media	4/25/03

Matter #	Ser. No.	Title	Filing Date
P123 US	10/281,619 (claims the benefit of 6/337,023)	Updating of Availability of Routes in a Network	10/28/02
P123 ZUS	60/387,023	Updating of Availability of Routes in a Network	6/7/02
P124 US	10/159,625 (Claims priority to 6/0/376,039)	Method and Apparatus for Load Balancing and Protecting Data Traffic in an Optical Ring	5/31/02
P124 ZUS	60/376,039	Method and Apparatus for Load Balancing and Protecting Data Traffic in an Optical Ring	4/28/02
P125 ZUS	60/376,041	Method and Apparatus for a Connection Manager to Support Unprotected Channels	4/28/02
P126 COMU S		E3/DS3 Loop-timing (Loop timing 1)	
P129 DSG	200609004-7	Dynamic Modification of a Subscriber Connection	12/22/06
P129 EPO	3724231	Dynamic Modification of a Subscriber Connection	4/25/03
P129 JP	2004-500/202	Dynamic Modification of a Subscriber Connection	4/25/03
P129 SG	200405002-7	Dynamic Modification of a Subscriber Connection	4/25/03
P129 WO	US03/12863	Dynamic Modification of a Subscriber Connection	4/25/03
P129 ZUS	60/375,684	Dynamic Modification of a Subscriber Connection	4/26/02
P130 US	10/464,233 (Claims benefit of 6/0/359,702)	Domain-Less Service Selection	6/17/03

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Matter #	Ser. No.	Title	Filing Date
P130.WO	US0319314	Domain-Less Service Selection	6/18/03
P130.ZUS	60/389,702	Domain-Less Service Selection	6/18/02
P132.US	10/214,901	METHOD AND APPARATUS FOR ROUTE OSCILLATION REDUCTION	8/8/02
P133.D2US	10,883,425 (Divisional of 10/265,789)	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/30/04
P133.D3US	10/883,070 (Divisional of 10/265,789)	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/30/04
P133.D4US	10/883,109 (Divisional of 10/265,789)	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/30/04
P133.WO	US0320456	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/27/03
P133.ZUS	60/397,353	Method and Apparatus for Routing and Forwarding Between Virtual Routers Within a Single Network Element	7/20/02

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Matter #	Ser. No.	Title	Filing Date
P134 WO	US0321623	Method and Apparatus for Selective Packet Mirroring	7/11/03
P134 ZUS	60/409,795	Method and Apparatus for Selective Packet Mirroring	9/11/02
P135 ZUS	60/403,348	Method and Apparatus for Accessing Management Information Base Data	8/14/02
P139 US	10/775,286	Context Selection in a Network Element Through Subscriber Flow Switching	2/9/04
P140 US	10/600,192	Method and Apparatus for Agnostic PPP Switching	6/20/03
P141 US	10/281,856 (Claims the benefit of 60/407,315)	Surplus Redistribution for Quality of Service Classifications for Packet Processing	10/28/02
P142 WO	US0327206	Hierarchy Tree-Based Quality of Service Classification for Packet Processing	8/29/03
P142 ZUS	60/407,315	Hierarchy Tree-Based Quality of Service Classification for Packet Processing	8/30/02
P144 ZUS	60/403,269	Method and Apparatus for Multicast Multiple Prefetch	8/14/02
P145 US	10/461,854	Method and Apparatus for Virtual Circuit Routes	6/13/03
P147 US	11/045,196 (Claims the benefit of 60/541,892)	MPLS Traffic Engineering for Point-to-Multipoint Label Switched Paths	1/27/05

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Matter #	Ser. No.	Title	Filing Date
P147 ZUS	60/541,892	MPLS Traffic Engineering for Point-to-Multipoint Label Switched Paths	2/3/04
P148 US	10/682,514	A Network Element Having a Redirect Server	10/8/03
P149 US	10/957,446 (Claims benefit of 60,509,307)	Protocol for Messaging Between a Centralized Broadband Remote Aggregation Server and Other Devices	9/30/04
P149 ZUS	60/593,07	Protocol for Messaging Between a Centralized Broadband Remote Aggregation Server and Other Devices	10/6/03
P150 US	10/956,175 (Claims the benefit of 60/516,541)	DHCP Proxy in a Subscriber Environment	9/30/04
P150 ZUS	60/516,541	DHCP Proxy in a Subscriber Environment	10/31/03
P151 US	10/954,395 (Claims Benefit of 60/516,200)	The use of IP address blocks with Default interfaces in a Router	9/29/04
P151 ZUS	60/516,200	The use of IP address blocks with Default interfaces in a Router	10/31/03

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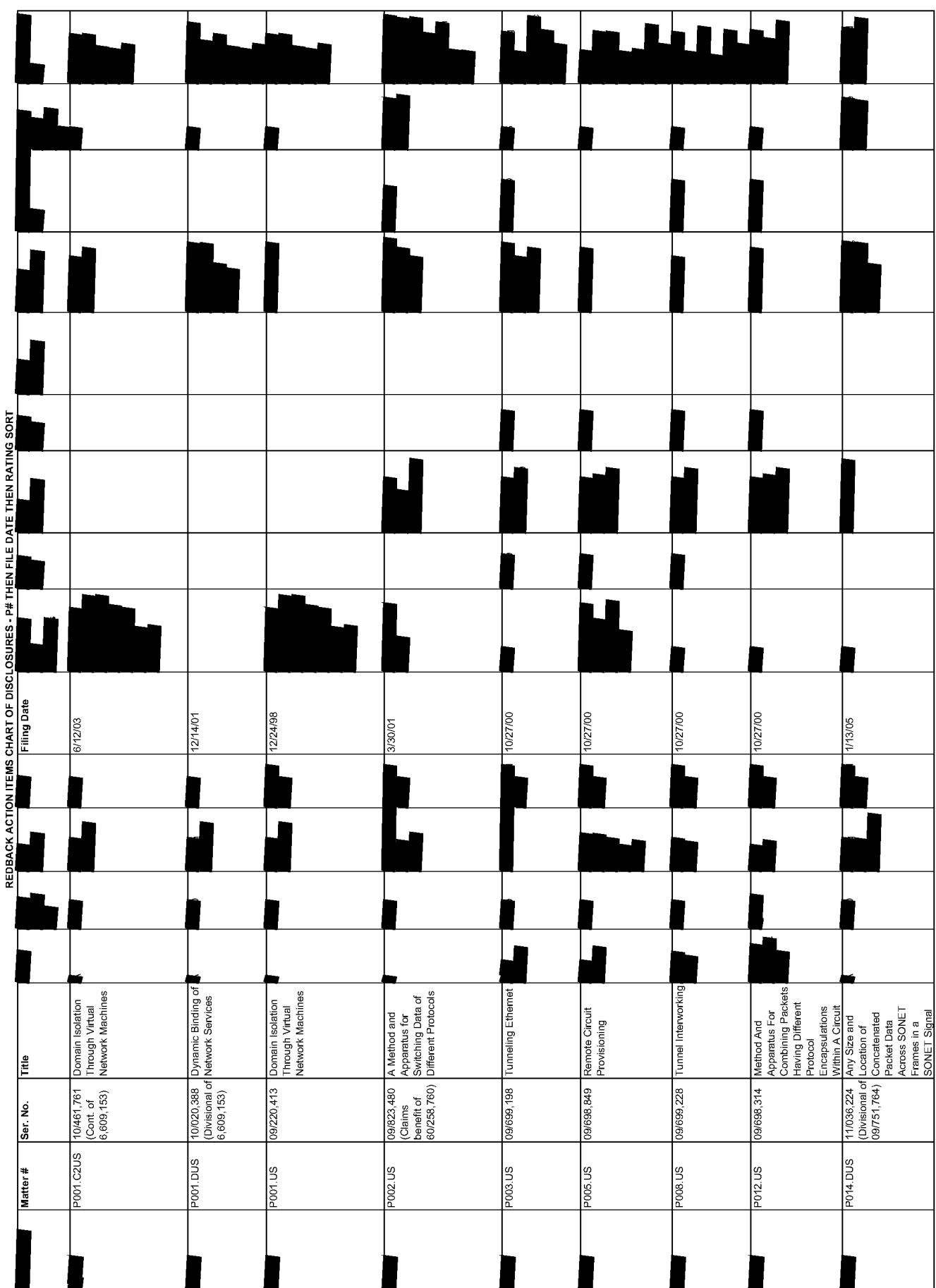
Matter #	Ser. No.	Title	Filing Date
P152 US	10955,671 (Claims benefit of 6/0/516,348)	A Network Element Having a DHCP Lease Timer	9/29/04
P152 ZUS	60/516,348	A Network Element Having a DHCP Lease Timer	10/31/03
P153 US	10/977,244 (Claims priority to 6/0/516,365)	Switchover for Broadband Subscriber Sessions	10/29/04
P153 WO	US2004/036 507	Switchover for Broadband Subscriber Sessions	11/1/04
P153 ZUS	60/516,365	Switchover for Broadband Subscriber Sessions	10/31/03
P154 US	10/975,201 (60/525,457)	Nexthop fast rerouter for P & MPLS	10/27/04
P154 ZUS	60/525,457	Nexthop fast rerouter for P & MPLS	11/26/03
P155 US	11/035,994 (Claims benefit of 6/0/543,414)	Method and an Apparatus for Route Selection in Routing Protocols	1/14/05
P155 ZUS	60/543,414	Method and an Apparatus for Route Selection in Routing Protocols	2/5/04
P157 US	11/406,961 (Claims benefit of 6/0/708,122)	Method and Apparatus For Securing A Layer II Bridge/Switch For Subscriber Aggregation	4/18/06
P157 ZUS	60/708,122	Method and Apparatus For Securing A Layer II Bridge/Switch For Subscriber Aggregation	8/11/05
P158 US	11/706,125 (Claims benefit of 6/0/773,867)	Source Routed Multicast LSP	2/12/07
P158 WO	Source Routed Multicast LSP	2/15/07	
P158 ZUS	60/773,867	Source Routed Multicast LSP	2/15/06

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Matter #	Ser. No.	Title	Filing Date
P160.US	11/725,084 (Claims benefit of 60/733,751)	Customer Traffic Forwarding Continues While Control Plane is Reset	3/16/07
P160.WO	11/725,084 (Claims benefit of 60/733,751)	Customer Traffic Forwarding Continues While Control Plane is Reset	3/16/07
P160.ZUS	60/783,751	Customer Traffic Forwarding Continues While Control Plane is Reset	3/17/06
P161.US	11/643,423	Hot-Swappable Modular Interface Cards based on Layer 1 interfacing	12/20/06
P162.US		Non-zeroed memory on memory controller reset	
P163.US	11/450,027	A Scalable Hierarchical Data Plane For IP based VPLS Networks	6/9/06
P163.WO		A Scalable Hierarchical Data Plane For IP based VPLS Networks	3/13/07
P164.US		Hardware Acceleration for Multi-Way Branches	
P165.US	11/583,525	Method and Apparatus for Traffic Shaping	10/18/06
P165.US		Simplified Algorithm for Dual Token Bucket Traffic Shaper	
P166.ZUS	60/905,521	A flexible, cost-effective solution for P2P/Gaming/Application traffic Detection and Treatment	3/6/07

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Matter #	Ser. No.	Title	Filing Date
P167 US		A lesser disruptive OSPF handling of BFD state changes	8/16/07
P168 US	11/725,125	System and Method to provide mobility to WiMAX subscriber station using existing DSL whole sale infrastructure	3/16/07
P169 US	11/729,289	System and Method to negotiate QoS parameters for a user session using Mobile IP between the Foreign Agent and Home Agent	3/27/07
P170 US		Dual-Stage Mesh Interface Connectivity for Packet Processing Systems	
P172 US		Forwarding data path optimization in a distributed environment for achieving mobility	10/19/07
P173 US	11/771,943	MOBILE IP BULK REGISTRATION REVOCATION	6/29/07
P175 ZUS	60/986,878	ADAPTIVE METHOD AND APPARATUS FOR ADJUSTING NETWORK TRAFFIC VOLUME REPORTING	8/29/07



Matter #	Ser. No.	Title	Filing Date
P014 US	09/751,764	Any Size and Location of Concatenated Packet Data Across SONET Frames in a SONET Signal	12/30/00
P019 US	09/752,649	A Cross-Connect With Shared Storage	12/29/00
P020 US	09/941,223	Method and Apparatus for Virtual Private Networks	8/28/01
P021 US	09/873,730	Fault Tolerant Network Element	6/20/01
P025 US	10/035,506	Method and Apparatus for PPPoE Multicast	10/22/01
P026 US	09/740,184	Method And Apparatus For Sharing Memory Space Across Multiple Processing Units	12/18/00
P027 US	09/835,474 (Claims benefit of 60/280,694)	Method and Apparatus for Sync Hunting Signals	4/16/01
P028 US	09/887,957 (Claims benefit of 60/258,759)	A Method and Apparatus for a Hybrid Variable Rate Pipe	6/22/01
P029 US	09/836,950 (Claims benefit of 60/280,692)	Stuffing Filter Mechanism for Data Transmission Signals	4/17/01
P030 GR3	323562 9	Alignment of TDM Over-Packets using a framed or an unframed technique for both DS1 and DS3	2/14/02

Matter #	Ser. No.	Title	Filing Date
P030 US	09/837,448 (Claims benefit of 60/280,661)	Alignment of TDM-Based Signals for Packet Transmission Using framed and unframed operations	4/17/01
P031 US	09/997,375	Method and Apparatus for Disabling an Interface Between Network Element Data Processing Units	11/30/01
P032 US	09/775,125	Method and Apparatus for Processing of Multiple Protocols within Data Transmission Signal	12/30/00
P034 US	09/751,584	Method and Apparatus for Processing of Multiple Protocols within Data and Control Channels in Data Transmission Signals	12/30/00
P038 US	09/904,377	A Method And Apparatus For Providing Scalability And Fault Tolerance In A Distributed Network	7/11/01
P040 US	09/903,911 (Claims benefit of 60/300,041)	Use of Transaction Agents to Perform Distributed Transactions	7/11/01
P046 US	09/316,929 (which claims benefit of 60/118,156)	Methods and Apparatus for Deploying Quality of Service Policies on a Data Communication Network	5/21/99

Matter #	Ser. No.	Title	Filing Date
P047 US	09/316,930 (which claims benefit of 60/118,156)	Packet Scheduling Methods and Apparatus	5/21/99
P048 US	09/316,469 (which claims benefit of 60/118,156)	Methods and Apparatus for Packet Classification with Multi-Level Data Structure	5/21/99
P049 US	09/316,466 (which claims benefit of 60/118,156)	Methods and Apparatus for Packet Classification with Multiple Answer Sets	5/21/99
P051 US	09/990,561 (Claims benefit of 60/252,535)	Service Provisioning Methods and Apparatus	11/12/101
P053 US	09/991,031 (Claims benefit of 60/252,576)	Policy Verification Method and Apparatus	11/12/101

Matter #	Ser. No.	Title	Filing Date
P054 US	09/985,285 (claims priority to 2,327,001)	Method and Apparatus for the Enumeration of Sets of Concurrent Scheduled Events	11/27/01
P055 US	09/990,569 (claims priority to 2,326,051)	Policy Change Characterization Method and Apparatus	11/21/01
P057 US	09/740,658	Cache Rekey Request Queue Scheduler for a Data Memory Access Having Multiple Channels	12/18/00
P058 US	09/740,659	Scheduler for a Data Memory Access Having Multiple Channels	12/18/00
P059 CUS	10/650,317 (Cont. of 09/740,670)	Free Memory Manager Scheme and Cache	8/27/03
P059 US	09/740,670	Free Memory Manager Scheme and Cache	12/18/00
P060 US	09/887,303 (Claims benefit of 60/258,761)	Protection mechanism for an optical ring	6/22/01
P061 US	09/823,871	Ring Network Element and the Ring Network Architectures it Enables (Combined with RB-005 and RB-173)	3/30/01
P062 US	10/035,538	Method and Apparatus for Changing the Data Rate of a Data Signal	10/23/01

Matter #	Ser. No.	Title	Filing Date
P063 US	10/102,461 (Claims benefit of 60/334,486)	Method and Apparatus for the Operation of a Storage Unit in a Network Element (Related to RB-113 - see if can combine)METHOD AND APPARATUS FOR THE OPERATION OF A STORAGE UNIT IN A NETWORK ELEMENT	3/20/02
P065 US	09/828,573	Parallel byte processing engines shared among multiple data channels	4/20/01
P067 US	09/885,372	Method and Apparatus for Traffic Scheduling	6/20/01
P071 US	09/821,981	Heterogeneous connections on a bi-directional line switched ring	3/31/01
P072 US	09/872,936	Method and Apparatus for Controlling the Admission of Data Into A Network Element	6/2/01
P073 US	09/823,293	On Board RAM based FIFO with pointers to buffer overhead bytes that point to SFE in SONET frames	3/30/01
P076 US	09/835,979 (Claims benefit of 60/280,694)	Method and Apparatus for Simultaneously Sync-Hunting Signals	4/16/01
P077 US	09/873,037	Method and Apparatus for Restart Communication Between Network Elements	6/2/01
P078 GB3	GB0327803 3	Method and Apparatus for Process Sync Restart	5/14/02

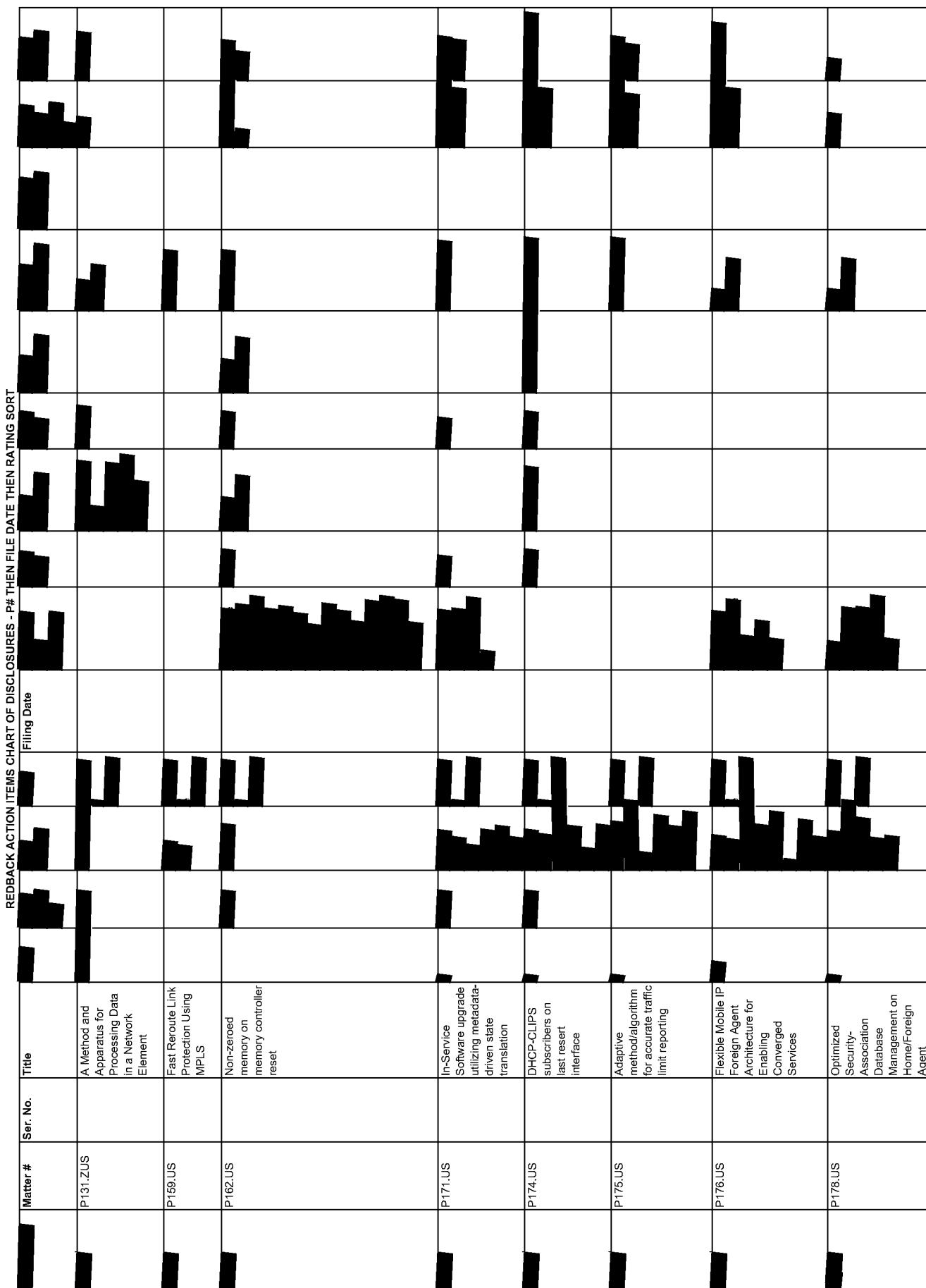
Matter #	Ser. No.	Title	Filing Date
P079 US	09/873,039	Method and Apparatus for Maintaining Consistent Data	6/2/01
P080 US	09/873,038	Method and Apparatus for Exception Handling In A Multi-Processing Environment	6/2/01
P084 US	10/021,152	Method and Apparatus for Unscheduled Flow Control in Packet Form	12/7/01
P088 US	09/992,354	Method and Apparatus for Attribute Oriented Routing Update	11/19/01
P094 SG	200400440-4	Method and Apparatus for Multiple Contexts and Layer 3 Virtual Private Networks	11/15/02
P098 US	10/032,729	Method and Apparatus for Replicating Packet Data within a Network Element	12/28/01
P103 US	10/266,116 (claims benefit of 60/359,099)	Processing Instructions Having Associated Suffixes	10/7/02
P107 US	10/103,252 (which claims benefit of 60/347,365)	Method and Apparatus for a Label Forwarding Information Base	3/21/02

Matter #	Ser. No.	Title	Filing Date
P108 US	10/103,253 (claims benefit of 60/347,365)	Method and Apparatus for Nonstop Forwarding with Labels	3/27/02
P111 US	10/159,341	Method and Apparatus for Graceful Restart	5/31/02
P114 US	10/602,461 (Claims priority to 60/390,630)	Repeated Switching of a Cross-Connect and a Timing Source in a Network Element through the use of a phase adjuster	6/23/03
P115 US	10/159,384 (Claims priority to 60/388,780)	Method and Apparatus for Hierarchical Circuits with Switching Decisions	5/31/02
P122 SG	200404035	Subscriber Service Selection Over Non-Channelized Media	4/25/03
P129 US	10/176,222 (Claims the benefit of 60/375,684)	Dynamic Modification of a Subscriber Connection	6/20/02
P133 DZGB	60/73555	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	1/27/03

Matter #	Ser. No.	Title	Filing Date
P133.DGB3	607357.1	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/27/03
P133.DGB3	521044.8	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/27/03
P133.GB3	507759.5	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	6/27/03
P133.HK	6111599.6	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	1/31/07

Matter #	Ser. No.	Title	Filing Date
P133 SG	200500322-3	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	1/18/05
P133 US	10/265,789	Method and Apparatus for Routing and Forwarding Between Virtual Routers within a Single Network Element	10/7/02
P134 US	10/292,161 (Claims the benefit of 60/449,795)	Method and Apparatus for Selective Packet Mirroring	11/12/02
P135 US	10/251,504 (Claims the benefit of 60/443,348)	Method and Apparatus for Accessing Management Information Base Data	9/20/02
P142 US	10/281,536 (Claims the benefit of 60/407,315)	Hierarchy Tree-Based Quality of Service Classification for Packet Processing	10/28/02
P143 US	10/281,537 (Claims the benefit of 60/407,315)	Priority-Based Efficient Fair Queuing for Quality of Service Classification for Packet Processing	10/28/02

Matter #	Ser. No.	Title	Filing Date
[REDACTED]	P144 US	10/237,385 (Claims benefit of 60/403,269)	Method and Apparatus for Multicast Multiple Prefetch



Matter #	Ser. No.	Title	Filing Date
[REDACTED]	P179.US	An event-driven, on-the-fly debugging technique in distributed/network systems consisting of co-operating nodes	[REDACTED]
[REDACTED]	P177.US	A flexible/scalable method for subscriber service management	[REDACTED]
[REDACTED]		Restartable TCP Sockets	[REDACTED]
[REDACTED]		Automatic software correction for distributed finite state machine errors	[REDACTED]
[REDACTED]		Generic Mobile Agent State Synchronization Mechanism	[REDACTED]
[REDACTED]		(To be filed 10:30)	Method for Floating, Aligning, Centering, Grounding and Blind-mating a Connector Set
[REDACTED]		(To be filed 10:30)	Methods for providing resiliency on RPF failure in P multicast networks
[REDACTED]	P180.US	Scalable Connectivity Fault Management (CFM) in a Bridged/VPLS Environment	[REDACTED]

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