Form PTO-1595 07 - 23	-2002	
R	Attorney's Docket No. 0023 0085	
To the Honorable Commissioner of P 10216	35278 Author & Bocket No. 0023-0083	
thereof.		
 Name of conveying party(ies): 7-12-02 Dennis C. FERGUSON; Philippe LACROUTE; Chi-Chung CHEN; Gerald CHEUNG; Tatao CHUANG; Pankaj PATEL; and Visweh ANANTHAKRISHNAN 	2. Name and address of receiving party(ies): Name: Juniper Networks, Inc.	
Additional name(s) of conveying party(ies) attached? Yes No	Address: 1194 North Mathilda Avenue Sunnyvale, California 94089-1206	
3. Nature of conveyance: Assignment Merger Security Agreement Change of Name Other: Execution Dates: July 8 and 10, 2002	Additional name(s) & address(es) attached? Yes No	
4. Application number(s) or patent number(s):		
If this document is being filed together with a new applicat 2002 A. Patent Application No.(s)	tion, the execution dates of the application is/are: July 8 and 10, B. Patent No.(s)	
Additional numbers attached? Yes No		
5. Name and address of party to whom correspondence should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41): \$40.00	
Name: Brian E. Ledell		
Address: HARRITY & SNYDER, L.L.P. 11240 Waples Mill Road Suite 300 Fairfax, Virginia 22030	Authorization to be charged to deposit account, if necessary.	
	8. Deposit account number:	
26615 SALEM LALEMARCHYSCE	50-1070	
DO NOT USE THIS SPACE		
9. 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		
Brian E. Ledell Reg. No. 42,784 Name of Person Signing Signat	July 12, 2002 Date	
Total number of pages including cover sheet, attachments, and document: 6		
Mail documents to be recorded with required cover sheet information to:		

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

07/23/2002 AANNED1 00000016 10193212

PATENT

REEL: 013099 FRAME: 0207

JOINT INVENTION (Worldwide Rights)

ASSIGNMENT

WHEREAS, WE, the below named inventors (hereinafter referred to as Assignors), have made an invention entitled:

MAINTAINING PACKET ORDER USING HASH-BASED LINKED-LIST QUEUES for which an application is being filed herewith; or for which we filed an application for United States Letters Patent on under Serial No. ; and WHEREAS, Juniper Networks, Inc., a corporation of Delaware whose post office address

WHEREAS, <u>Juniper Networks</u>, <u>Inc.</u>, a corporation of <u>Delaware</u> whose post office address is <u>1194 North Mathilda Avenue</u>, <u>Sunnyvale</u>, <u>California 94089-1206</u> (hereinafter referred to as Assignee), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we as assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, continuations, and continuations-in-part thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that we have the full right to convey the interest assigned by this Assignment, and we have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN TESTIMONY WHEREOF, WE have hereunto set our hand. IN WITNESS WHEREOF, I hereto set my hand. Dennis C. Ferguson 896 Melville Avenue Palo Alto, CA 94301 State of California) ss: County of Santa Clara) On this 10 day of July, 2002, before me, Heidi Opstedal, Notary Public, personally appeared Dennis C. Ferguson personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. HEIDI OPSTEDAL Signature of Notary Public
My Commission Expires: //19/03 Commission # 1205737 Notary Public - California Santa Clara County Ma Comm. Expires Jan 19, 2003 IN WITNESS WHEREOF, I hereto set my hand. Philippe LaCroute 1556 Magpie Lane Sunnyvale, CA 94087 State of California) ss: County of Santa Clara) On this // day of // , 2002, before me, Heidi Opstedal, Notary Public, personally appeared Philippe LaCroute personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. HEIDI OPSTEDAL Commission # 1205737 Notary Public - California Signature of Notary Public Santa Clara County

My Commission Expires:

gram, Expires Jan 19, 2003

IN WITNESS WHEREOF, I hereto set my hand	<i>a</i> —	
Chi-Chung Chen 22960 Cricket Hill Road Cupertino, CA 95014	Signature Clar Olen Date: 67/08/2002	
State of California)) ss:		
County of Santa Clara)		
on the basis of satisfactory evidence) to be t within instrument and acknowledged to me	, 2002, before me, Heidi Opstedal, <u>ling Chen</u> personally known to me (or proved to me he person(s) whose name is/are subscribed to the that he/she/they executed the same in his/her/their r signature on the instrument the person(s), or the ted, executed the instrument.	
HelDi OPSTEDAL Commission # 1205737 Notary Public - California Santa Clara County V Comm. Expires Jan 19, 2003	WITNESS my hand and official seal. Signature of Notary Public My Commission Expires: 1/19/13	
In WITNESS WHEREOF, I hereto set my hand		
Gerald Cheung	Signature: Gerald Cheung	
725 Ashby Drive Palo Alto, CA 94301	Signature: Gerald Cheung Date: July 8th, 02	
State of California)) ss:		
County of Santa Clara)		
On this		
HEIDI OPSTEDAL Commission # 1205737 Notary Public - California Santa Clara County [Notary Sea H Perer]. Expires Jan 19, 2003	WITNESS my hand and official seal. Signature of Notary Public My Commission Expires: //19/03	

In WITNESS WHEREOF, I hereto set my hand	·	
Tatao Chuang	Signature:	
1603 Ardenwood Drive	T14 0	
San Jose, CA 95129	Date: July 8. 200>	
State of California) ss:		
County of Santa Clara)		
instrument and acknowledged to me that he	r signature on the instrument the person(s), or the	
HEIDI OPSTEDAL Commission # 1205737 Notary Public - California Santa Clara County Santa Clara County [Notary Seal Here] The Expires Jan 19, 2003	WITNESS my hand and official seal. Signature of Notary Public My Commission Expires: //19/03	
In WITNESS WHEREOF, I hereto set my hand		
Pankaj Patel	Signature:	
1273 Aster Lane	07/00/2	
Cupertino, CA 95014	Date:	
State of California) ss:		
County of Santa Clara)		
On this		
HEIDI OPSTEDAL Commission # 1205737 Notary Public - California Santa Clara County [Notary Seal McGenm. Expires Jan 18, 2003	WITNESS my hand and official seal. Signature of Notary Public My Commission Expires: 1/19/03	

Attorney Docket No. 0023-0085 Page 5 of 5

IN WITNESS WHEREOF, I hereto set my hand. Signature: A.V. is wesh

Date: July 8,2002 Visweh Ananthakrishnan 754 W. Knickerbocker Drive Sunnyvale, CA 94087 State of California County of Santa Clara) On this day of July, 2002, before me, Heidi Opstedal, Notary Public, personally appeared Visweh Ananthakrishnan personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. HEIDI OPSTEDAL Signature of Notary Public
My Commission Expires: 1/19/03 Commission# 1205737 Notary Public - California Santa Clara County

RECORDED: 07/12/2002

ly Comm. Expires Jan 19, 2003