FORM **PTO-1595** $\overline{\mathsf{R}\epsilon}$ (Rev. 3/01)

J.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

OMD NO. 0651-0011 exp. 5/31/2002) 10	2077058
To the Honorable Commissioner of Patents and Trademarks.	Please record the attached original documents or copy thereof.
Name of conveying party(ies):	2. Name and address of receiving party(ies):
Felix Chow; Ricky See; Sharath Narahari	Name: Redback Networks Inc.
Additional name(s) of conveying party(ies) attached? No □Yes	Internal Address:
3. Nature of Conveyance	Street Address: 250 Holger Way
☐ Assignment ☐ Merger	
Security Agreement Change of Name	City: San Jose State/Provence: CA Zip: 95123 .
Other: Nunc Pro Tunc Assignment	Country: United States
Execution Date(s): 10/22/01; 12/1/01	Additional name(s) & address(es) attached?
Application Number(s) or patent number(s): If this document is being filed together with a new application. A. Patent Application No.(s) 09/751,584 Additional numbers Name and address of party to whom correspondence concerning document should be mailed:	B. Patent No.(s) attached? Yes No 6. Total number of applications and patents involved: 1
Name: Blakely, Sokoloff, Taylor & Zafman LLP	7. Total Fee (37 CFR 3.41)\$40.00
Internal Address: Daniel M. DeVos	Authorized to be charged to deposit account
Street Address: 12400 Wilshire Boulevard, 7th Floor	Deposit Account Number:
City: Los Angeles State: California Zip: 90025	
	(Attach duplicate copy of this page if paying by deposit account)
DO NOT I	USE THIS SPACE
9. Statement and signature. To the best of my knowledge and believe, the foregoing is true document Daniel M. DeVos	and correct and any attached copy is a true copy of the original
, tattle of tolograms	ignature // Date
Total number of pages including co	over sheet, attachments, and document: 6

Mail documents to be recorded with required cover sheet information to: Assistant Commissioner of Patents, Box Assignments Washington, D.C. 20231

Atty Docket No. 4906P034

05/02/2002 LMWELLER 00000013 09751584

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PATENT REEL: 012843 FRAME: 0838

NUNC PRO TUNC A S S I G N M E N T

Attorney's Docket No.: 4906P034 PATENT

This Nunc Pro Tunc Assignment is effective the <u>15th</u> day of <u>March</u>, <u>2001</u> by and between the below-identified Assignor and Assignee.

In consideration of good and valu	able consideration, the receipt of which is hereby
acknowledged, <u>We,</u> the undersigned, _	Felix Chow and Sharath Narahari
hereby sell, assign, and transfer to Redb	pack Networks Inc.
a corporation of <u>Delaware</u>	, having a principal place of business at
250 Holger Way, San Jose, California 95 and its successors, assigns, and legal repunited States and all foreign countries, in application for United States patent	5134
[_] that has been executed by the	e undersigned concurrently herewith,
[X] that was filed December 30	0, 2000 and assigned Application No. 09/751,584
	ATUS FOR PROCESSING OF MULTIPLE PROTOCOLS ELS IN DATA TRANSMISSION SIGNALS,

effective March 15, 2001, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United Stated and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application, effective March 15, 2001; and

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives, effective March 15, 2001; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

- 1 -

Date:	12/1/	_, 20 <u>&/</u>	Name: Felix Chow
Date:		_, 20	Name: Sharath Narahari
Date:		_, 20	Name:
Date:		_, 20	Name:
Date:		_, 20	Name:
Date:		_, 20	Name:

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 12400 Wilshire Blvd., Seventh Floor Los Angeles, California 90025-1026 (408) 720-8300

NUNC PRO TUNC A S S I G N M E N T

Attorney's Docket No.: 4906P034 **PATENT**

This Nunc Pro Tunc Assignment is effective the 12th day of February, 2001 by and between the below-identified Assignor and Assignee.

In consideration of good and valuable conside	ration, the receipt of which is hereby	
acknowledged,I_the undersigned,Ricky See		
hereby sell, assign, and transfer to Redback Network	s Inc.	
a corporation of <u>Delaware</u>	_, having a principal place of business at	
250 Holger Way, San Jose, California 95134 , ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for United States patent		
[_] that has been executed by the undersigned concurrently herewith,		
[X] that was filed December 30, 2000 and as	ssigned Application No. <u>09/751,584</u>	
and is entitled <u>METHOD AND APPARATUS FOR P</u> WITHIN DATA AND CONTROL CHANNELS IN DATA		

effective <u>February 12, 2001</u>, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United Stated and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application, effective <u>February 12, 2001</u>; and

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned wiil execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives, effective February 12, 2001; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: 10 (72 (_, 20 <u>c l</u>	Name: Ricky See
Date:	_, 20	Name:
Date:	, 20	Name:

Assignment Document Return Address:
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Blvd., Seventh Floor
Los Angeles, California 90025-1026
(408) 720-8300

NUNC PRO TUNC A S S I G N M E N T

Attorney's Docket No.: 4906P034 PATENT

This Nunc Pro Tunc Assignment is effective the 15th day of March, 2001 by and between the below-identified Assignor and Assignee.

In consider	ation of good and valuable consider	ration, the receipt of which is hereby
acknowledged,V	<u>Ne,</u> the undersigned, <u>Felix Chow</u>	and Sharath Narahari
hereby sell, assign,	and transfer to Redback Network	s Inc.
a corporation ofD	Delaware	, having a principal place of business at
250 Holger Way, San Jose, California 95134 , ("Assignee"), and its successors, assigns, and legal representatives, my/our entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for United States patent		
[_] that has	s been executed by the undersigned	d concurrently herewith,
[X] that wa	as filed <u>December 30, 2000</u> and as	signed Application No. <u>09/751,584</u>
	ETHOD AND APPARATUS FOR PE CONTROL CHANNELS IN DATA	ROCESSING OF MULTIPLE PROTOCOLS TRANSMISSION SIGNALS

effective March 15, 2001, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United Stated and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application, effective March 15, 2001; and

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives, effective March 15, 2001; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date:		_, 20	Name: Felix Chow
Date:	10-22	_, 20 <u>01</u>	Name: Sharath Narahari
Date:		_, 20	Name:
Date:		_, 20	Name:
Date:		_, 20	Name:
Date:		_, 20	Name:

Assignment Document Return Address: BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP 12400 Wilshire Blvd., Seventh Floor Los Angeles, California 90025-1026 (408) 720-8300