08-19-2003				
Form PTO-1595 Rs 100 Form PTO-1595 U.S. DEPARTMENT OF COMMERCE				
Form PTO-1595 R 102588218 U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office U.S. Patent and Trademark Office				
To the Honorable Commissioner of Patents and Trademarks: P	lease record the attached original documents or copy thereof			
1. Name of conveying party(ies): 7.29.03	2. Name and address of receiving party(ies)			
Shivkumar Kalyanaraman (03/25/2003), Neelkanth Natu (05/22/2003), Priya Rajagopal (04/02/2003), Puneet	Name: Rensselaer Polytechnic Institute			
Thapliyal (07/16/2003), Sidhartha ' (06/18/2003), and	Internal Address:			
Jiang Li (04/25/2003) Additional name(s) of conveying party(ies)	Street Address:			
Additional name(s) of conveying party(ies) Yes x No attached?	3210 J Building			
3. Nature of Conveyance:				
x Assignment				
Security Agreement Change of Name	City: Troy			
Other	State: <u>NY</u> Zip: <u>12180</u>			
Execution Date: July 17, 2003	Additional name(s) & Yes X No address(es) attached:			
4. Application number(s) or patent number(s):				
If this document is being filed together with a new application, the exc	ecution date of the new application is:			
A. Patent Application No.(s):	B. Patent No.(s):			
10/240,323				
Additional numbers attache	ed? Yes XNo			
 Name and address of party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved:1			
Name: DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP	7. Total fee (37 CFR 3.41) \$ 40.00			
Internal Address: Atty. Dkt.: R1797.0008/P008	Enclosed			
Street Address:	X Authorized to be charged to deposit account			
2101 L Street NW	X Authorized to be charged to credit card			
	(Form 2038 enclosed)			
Cibr States 7in.	8. Deposit account number:			
City:State:Zip:WashingtonDC20037-1526	04-1073 (Attach duplicate copy of this page if paying by deposit account)			
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9. Statement and signature.				
To the best of my knowledge and belief, the foregoing info	rmation is true and correct and any attached copy			
is a true copy of the original document.	U			
Jon D. Grossman (32,699)	July 29, 2003			
Name of Person Signing	Signature Date			
Total number of pages including cover sheet, attach	l ments, and documents: 10			
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PATENT REEL: 014386 FRAME: 0067

ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT by Shivkumar Kalyanaraman; Neelkanth Natu; Priya Rajagopal; Puneet Thapliyal; Sidhartha; and Jiang Li (hereinafter referred to as Assignors), all residing at c/o Rensselaer Polytechnic Institute, 3210 J Building, Troy, New York 12180, respectively;

WHEREAS, Assignors have invented certain new and useful improvements in SYSTEM AND METHOD OF SOURCE BASED MULTICAST CONGESTION CONTROL, set forth in a Patent application for Letters Patent of the United States, already filed on October 1, 2002 as U.S. application No. _______; and

WHEREAS, Rensselaer Polytechnic Institute, a organization organized under and pursuant to the laws of New York having a place of business at c/o Rensselaer Polytechnic Institute, 3210 J Building, Troy, New York 12180 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property including all rights of priority, the same to be held and enjoyed by Assignee, for its own use and benefit and the

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use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent applications for Letters Patent for said inventions for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions

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and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP

Gary M. Hoffman	26,411	Ryan H. Flax	48,141	Ellen S. Tao	43,383
Thomas J. D'Amico	28,371	Richard LaCava	41,135	Gary L. Veron	39,057
Donald A. Gregory	28,954	John C. Luce	34,378	Steven I. Weisburd	27,409
James W. Brady, Jr.	32,115	Peter McGee	35,947	Mialeeka C. Williams-Bibbs	48,037
Jon D. Grossman	32,699	Edward A. Meilman	24,735	Peter Zura	48,196
Mark J. Thronson	33,082	Edwin Oh	45,319	Jeremy A. Cubert	40,399
Eric Oliver	35,307	William E. Powell, III	39,803	Gianni Minutoli	41,198
Laurence E. Fisher	37,131	Steven S. Rubin	43,063	Michael Bergman	42,318
Ian R. Blum	42,336	Michael J. Scheer	34,425	Salvatore P. Tamburo	45,153
Gabriela I. Coman	50,515	Stephen A. Soffen	31,063	Peter A. Veytsman	45,920
Catherine A. Ferguson	40,877	Christopher M. Tanner	41,518	Christopher S. Chow	46,493

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

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Shivkumar Kalyanaraman

03/25/03 Date:

United States of America) State of $\frac{Ne \ W}{Vor \ k}$) ss.: County of $\frac{Ren \ sse/a \ e \ r}{}$)

On this 25^{4} day of <u>march</u>, <u>2003</u>, before me personally came <u>Shivkumar Kalyanaraman</u>, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Eleaner 7 Meyer Notary Public

ELEANOR F. MEYER Notary Public, State of New York Residing in Albany County Commission Expires Mar. 30, 19, 10 4609048 2 co. 7

	N.S.Natu
.)	Neelkanth Natu
Date: $522/03$	
United States of America)	
State of <u>California</u>) ss.:	
County of <u>Santaclary</u>)	
On this <u>Q</u> day of <u>M</u>	$_{,}$ $_{,}$ before me
personally came <u>Neelkanth Natu</u>	, to me known to be the individual
described in and who executed the foregoing i	instrument, and acknowledged execution
of the same.	May "
	Notary Public
SANJEEV KUMAR PARIKH Commission # 1379397 Notory Public - Collifornia Sonta Clara County My Coltrin, Expires Nov 6, 2005	·

Priya Rajagopal

4/2/03 Date:

United States of)
State of D	REGON	_) ss.:
County of 1	INGHINGTON	_)

On this <u>A</u> day of <u>April</u>, <u>2003</u>, before me personally came <u>Priya Rajagopal</u>, to me known to be the individual

described in and who executed the foregoing instrument, and acknowledged execution of the same.

hm

Notary Public



Chapley

Puneet Thapliyal

Date:	July	16	200	3
United	States of	Am	erica	

State of California) ss.: County of San Mateo

<u>2003</u>, before me On this 16 day of July Puneet Thapliyal, to me known to be the individual personally came described in and who executed the foregoing instrument, and acknowledged execution of the same.

KOSEMANE C Notary Public





That

Sidhartha

Date: 06/18/03

United Stat	tes of Amer	rica)
State of	Washington	^) ss.:
County of	King)
On this	1955	day of	June



2003 befo

personally came <u>Sidhartha</u>', to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

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PATENT

	_ LA
Date: 04/15/2003	Jiang Li
United States of America)	
State of) ss.: County of)	
On this <u>25</u> day of <u>April</u> personally came <u>Jiang Li</u> described in and who executed the foregoing in of the same.	, <u>2003</u> , before me , to me known to be the individual nstrument, and acknowledged execution

Ken 0Λ. \mathcal{M} Notary Public

JENNIFER KANE Notary Public, State of New York No. 01KA6079072 Qualified in Rensselaer County My Commission Expires Aug. 12, 20