To the Director of the U.S. Patent and Tr 1. Name of conveying party(ies)/Execution Rong YU Execution Date(s): 05/16/2008 Additional name(s) of conveying party(ies) attached? Yes No No Street Address: 176 South Street Hopkinton, Massachusetts 01748 Country: United States of America	•		
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Country: United States of America			
☐ Security Agreement ☐ Change of Name ☐ Government Interest Assignment ☐ Executive Order 9424, Confirmatory License			
Other: Additional name(s) & address(es) attached? \[\text{Yes} \times \text{No.} \]			
4. Application or patent number(s): A. Patent Application No.(s) 12/079,939 This document is being filed together with a new application B. Patent No.(s)			
Additional numbers attached? ☐ Yes ☒ No			
5. Name and address to whom correspondence concerning document should be mailed: 6. Total number of applications and patents involved: 1			
Name: Muirhead and Saturnelli, LLC 7. Total fee (37 CFR 1.21(h) & 3.41)			
Internal Address: Authorized to be charged by credit card Authorized to be charged to deposit account			
Street Address: 200 Friberg Parkway Suite 1001 Enclosed None required (government interest not affecting tit	;)		
City: Westborough 8. Payment Information	\dashv		
State: Massachusetts Zip: 01581 a. Credit Card Last 4 Numbers			
Fax Number: 508-898-8602 Expiration Date b. Deposit Account Number05-0889 Authorized User NameAnne E. Saturnelli			
Anna F. Saturna Hi, D. e. No. 41 200	9939		
Name of Person Signing Signature Total number of pages including cover sheet, attachments, and documents: 5			

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P.O. Box 1450, Alexandria, VA 22313-1450

PATENT REEL: 021080 FRAME: 0089

Attorney Docket No.: EMS-182US2 EMC Docket No.: EMC-07-369

ASSIGNMENT

WHEREAS, we, Rong YU, Orit LEVIN-MICHAEL, and John W. LEFFERTS, have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled TECHNIQUES FOR MANAGEMENT OF INFORMATION REGARDING A SEQUENTIAL STREAM, the specification of which:

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;	
[X]		was filed on March 28, 2008 as U.S. Application No. 12/079,939;	
[]	was patented under U.S. Patent Noon	

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein:

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the

PATENT REEL: 021080 FRAME: 0090

Attorney Docket No.: EMS-182US2 EMC Docket No.: EMC-07-369

giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:	V/16/08	
_	3 1	

Inventor's Signature

Print full name of first inventor:

Rong YU

Residence:

32 Charles River Drive

Franklin, MA 02038

Citizenship:

CHINA (People's Republic)

Mailing Address:

Same

STATE OF MASSACH USETTS
COUNTY OF MODULE SEX

On this // day of // , 2008, then personally appeared before me the above-named Rong YU known to me through satisfactory evidence of identification [_] employee identification card; [_] driver's license; [X] (other) // (

Notary Public

Print Name:

My Commission expires:

SANDELA A KULAGA
Notery Public
Commonwealth of Maisschusetts
My Commission Expires
March 27, 2000

Attorney Docket No.: EMS-182US2 EMC Docket No.: EMC-07-369

Date:		
	Inventor's Signature	
Print full name of second inventor:	Orit LEVIN-MICHAEL	
Residence:	154 Tapestry	
	Irvine, CA 92603	
Citizenship:	USA and ISRAEL	
Mailing Address:	Same	
	then personally appeared before me the above-named through satisfactory evidence of identification [
employee identification card; [] driver to be the person whose name is	's license; [_] (other)s subscribed to the foregoing Assignment and ame as his/her free act and deed for the purposes therein	
	Notary Public	
	Print Name:	

My Commission expires:

Attorney Docket No.: EMS-182US2 EMC Docket No.: EMC-07-369

Date:	
	Inventor's Signature
Print full name of third inventor:	John W. LEFFERTS
Residence:	59 Dodge Hill Road
	Sutton, MA 01590
Citizenship:	USA
Mailing Address:	Same
John W. LEFFERTS known to me thr	then personally appeared before me the above-named ough satisfactory evidence of identification []
John W. LEFFERTS known to me threemployee identification card; [] drive to be the person whose name is acknowledged that he/she executed the	
contained.	
	Notary Public
	Print Name:
•	My Commission expires:

RECORDED: 06/09/2008

PATENT REEL: 021080 FRAME: 0093