Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)

02-15-2007

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office DS

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the Paragraph 1. Name of conveying party(ies) Rajeev Govindan, Thomas Giglia, William Kuhhirte; Ehud Kleers Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 2/5/07; 12/7/06; 12/7/06; 12/7/06 Assignment Merger Security Agreement Change of Name Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? B. Patent No.(s)	rty(ies) nsel 748-9103 □ Yes ✓
Rajeev Govindan, Thomas Giglia, William Kuhhirte; Ehud Kleers Name: EMC Corporation	748-9103 •
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 2/5/07; 12/7/06; 12/7/06 Assignment Merger Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? 4. Application or patent number(s): A Patent Application No.(s) Internal Address: Office of the General Counter No Street Address: 176 South Street City: Hopkinton State: Ma Country: USA Zip: 01: Additional name(s) & address(es) attached? 4. Application No.(s) B. Patent No.(s)	748-9103 □ Yes 🗸
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 2/5/07; 12/7/06; 12/7/06 Assignment Merger City: Hopkinton State: Ma Government Interest Assignment Executive Order 9424, Confirmatory License Other Other Additional name(s) & address(es) attached? This document is being filed together with a name of the patent No.(s) B. Patent No.(s)	748-9103 □ Yes 🗸
3. Nature of conveyance/Execution Date(s): Execution Date(s) 2/5/07; 12/7/06; 12/7/06 ✓ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Joint Research Agreement ☐ Government Interest Assignment ☐ Executive Order 9424, Confirmatory License ☐ Other ☐ Other ☐ Application or patent number(s): ☐ A. Patent Application No.(s) ☐ Street Address: 176 South Street ☐ City: Hopkinton State: Ma Country: USA Zip: 013 Additional name(s) & address(es) attached? This document is being filed together with a new control of the country of the c	Yes ✓
Execution Date(s) 2/5/07; 12/7/06; 12/7/06 Assignment	Yes ✓
✓ Assignment Merger Security Agreement Change of Name Joint Research Agreement State: Ma Government Interest Assignment Country: USA Executive Order 9424, Confirmatory License Additional name(s) & address(es) attached? Other	Yes ✓
Security Agreement Change of Name Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? 4. Application or patent number(s): A. Patent Application No.(s) City: Hopkinton State: Ma Country: USA Zip: 01: Additional name(s) & address(es) attached? B. Patent No.(s)	Yes ✓
Joint Research Agreement Government Interest Assignment Executive Order 9424, Confirmatory License Other	Yes ✓
Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? Application or patent number(s): This document is being filed together with a number A. Patent Application No.(s) B. Patent No.(s)	Yes ✓
Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? Application or patent number(s): This document is being filed together with a number (s). B. Patent No.(s)	Yes ✓
Other Additional name(s) & address(es) attached? 4. Application or patent number(s): A. Patent Application No.(s) B. Patent No.(s)	Yes ✓
4. Application or patent number(s): A. Patent Application No.(s) This document is being filed together with a number A. Patent Application No.(s) B. Patent No.(s)	
4. Application or patent number(s):	
A. Patent Application No.(s) B. Patent No.(s)	ew applica
Additional numbers attached?	
5. Name and address to whom correspondence 6. Total number of applications and p	atents
concerning document should be mailed: involved: 1 Name:Carl A. Giordano	
7. Total fee (37 CFR 1.21(h) & 3.41) \$	
Internal Address: EMC Corporation Authorized to be charged by credit	card
Authorized to be charged to deposi	t account
Street Address: 44 South Broadway, 7th flr Enclosed	
None required (government interest r	ot affecting
City: White Plains 8. Payment Information	
State: NY Zip: 10601 a. Credit Card Last 4 Numbers	
Phone Number: 914 798 8505	
Fax Number: 914 948 6270 b. Deposit Account Number 05-0889	
Email Address: Giordano Carl@emc.com Authorized User Name Carl A. Giord	lano
9. Signature:	
DBYRNE 00000 266 050889 11638125 Signature February	
40.00 DA Carl A. Giordano Total number of pages including	
1 1 Carr A. Giordano l'utai humber of bades including	cover 1

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Express Mail Mailing Label No.

ASSIGNMENT

WHEREAS, we, Rajeev Govindan, Thomas Giglia, William Kuhhirte and Ehud Kleers 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

Method and Apparatus for Representing, Managing, Analyzing
And Problem Reporting in Home Networks

[]	is being executed on even date herewith and is about to be filed in the United States Patent Office;
[XX]	was filed on 12/13/2006 as Application No. 11/638,125
[]	was patented under U.S. Patent Noon

the specification of which:

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:

> PATENT REEL: 018918 FRAME: 0046

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 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:

-2-

PATENT REEL: 018918 FRAME: 0047

Date: 02 05 07	
	Inventor's Signature
Print full name of third inventor:	Rajeev Govindan
Residence:	252 Nathan Bvd., Parlin, NJ 08859
Citizenship:	India
Mailing Address:	Same as above
STATE/COMMONWEALTH OF COUNTY OF On this 5 72 day of FEBRUAR above-named R. GOVINDAN known to	HEW YORK WEST CHESTER , 200 \(\frac{1}{2}\), then personally appeared before me the me through satisfactory evidence of identification [\(\frac{1}{2}\)]
employee identification card; [] dri	ver's license; [] (other)
Assignment and acknowledged that he purposes therein contained.	_ to be the person whose name is subscribed to the foregoing e/she executed the same as his/her free act and deed for the
	Notary Public
	Print Name: CALL A. GIURDANIO
	My Commission expires 3 / 23 / 2010

Carl A. Giordano
Notary Public, State of New York
No. 02Gi6142485
Qualified in Rockland County
Commission Expires 3/20/2010

Date: 12/07/2006	There R Dilli			
	Inventor's Signature			
Print full name of third inventor:	Thomas Giglia			
Residence:	77 Hill Street, Mahopac, NY 10541			
Citizenship:	USA			
Mailing Address:	Same as above			
STATE/C OMMONWEALTH OF	Mon York			
COUNTY OF	Mew YORK WESTCHESTER			
On this				
	Notary Public			
	Print Name: CACL A-GIONOS ALO			
	My Commission expires 3 / 20 / 20 /			

Cart A. Glordano Notary Public, State of New York No. 02G/6142485 Qualified in Rockland County Commission Expires 3/20/2010

Date: 12/7/2006	Miller
·•	Inventor's Signature
Print full name of third inventor:	William Kuhhirte
Residence:	322 176 th Avenue Cir, Redington Shores, FL 33708
Citizenship:	USA
Mailing Address:	Same as above
STATE/C OMMONWEALTH OF	HEW YORK
COUNTY OF	HEW YORK WESTCHESTER
On this $7^{\frac{11}{12}}$ day of $\frac{1}{12}$ day of $\frac{1}{12}$ known to employee identification card; $\frac{1}{12}$ dr.	, 200 \nearrow , then personally appeared before me the me through satisfactory evidence of identification $[\times]$ iver's license; $[$ $[$ $]$ $[$ $]$ $[$ $]$ to be the person whose name is subscribed to the foregoing
Assignment and acknowledged that he purposes therein contained.	ne/she executed the same as his/her free act and deed for the
	Notary Public
	Print Name: CARC A. GIORDANS
	My Commission expires 3 / 23 / 23/0

Carl A. Glordano
Notary Public, State of New York
No. 02Gl6142485
Qualified in Rocidand County
Commission Expires 3/20/2010

Date: 12/7/1006	adoc			
((Inventor's Signature			
Print full name of third inventor:	Ehud Kleers			
Residence:	295 Nob Hill Drive, Elmsford, NY 10523			
Citizenship:	Israel			
Mailing Address:	Same as above			
	STCHAROL			
On this \(\frac{71}{1} \) day of \(\frac{1600}{1000} \) known to me through satisfactory evidence of identification \(\frac{1600}{1000} \) employee identification card; \(\begin{array}{c} \begin{array}{c} \frac{1600}{1000} \end{array} \) (other) to be the person whose name is subscribed to the foregoing				
Assignment and acknowledged that he/she purposes therein contained.	executed the same as his/her free act and deed for the			
	Notary Public			
	Print Name: <u>CACLA-GIOLOM</u> My Commission expires <u>3</u> / <u>2</u> / <u>2</u> /			

Carl A. Glordano Notary Public, State of New York No. 02Gl6142485 Qualified in Rockland County Commission Expires 3/20/2010

-6-

PATENT REEL: 018918 FRAME: 0051

RECORDED: 02/12/2007